

PRICE ANALYSIS

TEXT/REFERENCE



FEDERAL ACQUISITION INSTITUTE
OFFICE OF ACQUISITION POLICY
MAY 1992 (FAC 90-10)

ACKNOWLEDGMENTS

Prepared for the Federal Acquisition Institute

*By M. Dale Shields, Ph.D.
Production Management Development
Dayton, Ohio*

*Pursuant to a contract with CAE-LINK Corporation
Falls Church, Virginia*

I would like to thank the following for their assistance in preparing and reviewing this text.

Jack Livingston, Director
Federal Acquisition Institute

Michael Miller
Team Leader, Cost and Price Analysis
Federal Acquisition Institute

Joyce Allen
Pricing and Contract Administration
Division (SAF/AQCP)
Office of Assistant Secretary (Acquisition)
United States Air Force

Donette Cappello
Department of Energy (PR-14)

Patrick Conley
Office Equipment Division (FCGE)
Federal Supply Service
General Services Administration

Gary Craig
GSA Interagency Training Center
General Services Administration

Jerry C. Gilbart
Contracting Directorate (DLA-PPR)
Defense Logistics Agency

Major Janie Maddox
School of Systems and Logistics
(AFIT/LSQ)
Air Force Institute of Technology

James Murphy
Patent & Trademark Office
Department of Commerce

Jeremy F. Olsen
Office of Acquisition Policy (VR)\
General Services Administration

David Schuur
Contracting Management Directorate (021B)
Naval Supply Systems Command
Department of Navy

TABLE OF CONTENTS

	PAGE
Preface	vii
INTRODUCTION. PRICES AND PRICING	
I.1	Determine the Seller's Pricing Objectives and ApproachesI-5
I.1.1	Determine the Seller's Pricing ObjectivesI-6
I.1.2	Determine the Seller's Approaches to PricingI-7
I.1.3	Review Seller's Cost-based Pricing Strategies.....I-8
I.1.4	Review Seller's Market-based StrategiesI-15
I.2	Identify Government's Pricing ObjectiveI-25
I.2.1	Pay a Fair and Reasonable Price.....I-27
I.2.2	Identify Markets and Pricing AdvantageI-29
I.2.3	Price Each Contract SeparatelyI-31
I.2.4	Exclude Contingencies.....I-33
I.3	Identify Government's Approaches to Contract PricingI-35
I.3.1	Perform Price AnalysisI-37
I.3.2	Perform Cost AnalysisI-38
I.4	Identify Potential Participants in the Price AnalysisI-39
I.4.1	Potential ParticipantsI-40
I.4.2	Types of AssistanceI-41
CHAPTER 1. PREPARE FOR PRICE ANALYSIS	
1.1	Step 1: Review the Purchase Request.....1-9
1.1.1	How Was the Estimate Made?.....1-10
1.1.2	What Assumptions Were Made?.....1-11
1.1.3	What Information and Tools Were Used?1-12
1.1.4	Where Was the Information Obtained?1-14
1.1.5	How Did Previous Estimates Compare with Prices Paid?.....1-15
1.2	Step 2: Review Acquisition Histories1-17
1.2.1	Types of Acquisition Histories1-18
1.2.2	Price-Related Information in Acquisition Histories1-19

TABLE OF CONTENTS

	PAGE
1.3. Step 3: Research Market Data	1-21
1.3.1 What to Research	1-22
1.3.2 Publish Market Data.....	1-24
1.3.3 Other Sources of Market Data	1-38
1.4 Step 4: Estimate Proper Price Level	1-45
1.4.1 Evaluating the Data.....	1-46
 CHAPTER 2. MAXIMIZE PRICE COMPETITION	
2.1 Strategies for Improving the Schedule	2-9
2.1.1 Consolidate Requirements.....	2-10
2.1.2 Promote Performance Specifications	2-15
2.1.3 Commercialize the Purchase Description	2-17
2.1.4 Target the Optimum Market Segment	2-32
2.1.5 Match Delivery Schedule to the Market.....	2-35
2.1.6 Obtain Industry Feedback on Proposed Specifications	2-39
2.1.7 Obtain Relief from Restrictive Requirements	2-41
2.2 Strategies for Improving Business Terms and Conditions	2-47
2.2.1 Base the Contract Type on Risk Analysis	2-48
2.2.2 Review Applicability of Socioeconomic Requirements.....	2-53
2.2.3 Match Payment and Finance Terms to Market Conditions	2-55
2.2.4 Furnish Government Property	2-57
2.2.5 Minimize Cost of Warranty Requirements.....	2-59
2.2.6 Optimize Price/Technical Tradeoffs	2-60
2.3 Strategies for Publicizing the Acquisition	2-63
 CHAPTER 3. PRICE-RELATED DATA FROM OFFERORS	
3.1 Step 1: Determine Certified Cost or Pricing Data Requirements	3-7
3.1.1 Identify Situations Requiring Certified Cost or Pricing Data.....	3-9
3.1.2 Determine Requirement for Certified Cost or Pricing Data for Purchases under \$100,000	3-11
3.2 Step 2: Determine Applicability of Exemptions from Cost or Pricing Data Requirements	3-15
3.2.1 Review Exemptions and Waivers to Certified Cost or Pricing Data Requirements	3-16
3.2.2 Determine Whether Adequate Price Competition Exists	3-19
3.2.3 Determine Exemptions Based On Adequate Price Competition	3-23
3.2.4 Determine Exemptions Based On Catalog Prices	3-24
3.2.5 Determine Exemptions Based On Market Prices.....	3-32
3.2.6 Determine Exemptions Based On Regulated Prices	3-35

	PAGE
3.3 Step 3: Identify Additional Data Needed from the Offeror to Support an Offered Price	3-37
3.3.1 Identify Other Necessary Price Related Data	3-38
3.3.2 Identify Necessary Uncertified Cost Data	3-40
 CHAPTER 4. SELECT PRICE-RELATED FACTORS FOR AWARD	
4.1 Step 1: Select Possible Award Combinations	4-7
4.1.1 Aggregate Award of All Line Items to One Contractor.....	4-9
4.1.2 Multiple Awards for Different Line Items	4-10
4.1.3 Family or Group Buys	4-11
4.1.4 Progressive Awards for Portions of Total Line Item Requirement	4-12
4.1.5 Multiple Awards for the Same Line Item.....	4-13
4.1.6 Split Awards	4-14
4.1.7 Partial Set-Aside Awards	4-15
4.2 Step 2: Select Price-Related Factors for Award	4-17
4.2.1 Identify Applicable Price-Related Factor	4-18
4.2.2 Identify Formula(s) for Evaluation	4-48
4.2.3 Select Method of Award Clauses or Provisions.....	4-49
 CHAPTER 5. APPLY PRICE-RELATED FACTORS	
5.1 Apply Assumed Administrative Costs Factors	5-7
5.2 Apply Buy American Act Criteria	5-11
5.3 Apply Quality-Related Factors.....	5-17
5.3.1 Blue Ribbon Contractor Programs.....	5-18
5.3.2 Vendor Rating Systems	5-21
5.3.3 Supplier Performance Index	5-24
5.4 Apply Government Furnished Production and Research Property Factors	5-27
5.4.1 Eliminate Competitive Advantage.....	5-28
5.4.2 Consider Costs and Savings to the Government	5-31
5.5 Apply Transportation Cost Factors.....	5-35
5.6 Apply Energy Conservation and Efficiency Factors	5-39
5.7 Consider Lease vs. Purchase	5-43

TABLE OF CONTENTS

	PAGE
CHAPTER 6. COMPARE PRICES	
6.1	Make Comparisons..... 6-7
6.1.1	Select Prices for Comparison..... 6-11
6.1.2	Identify Factors that Affect Comparability 6-12
6.1.3	Determine the Effect of the Factors Identified 6-16
6.1.4	Adjust the Prices Selected for Comparison 6-17
6.1.5	Compare Adjusted Prices to the Offer in Line for Award 6-18
6.2	Types of Comparisons 6-21
6.2.1	Use Competitive Prices..... 6-24
6.2.2	Use Commercial Prices..... 6-31
6.2.3	Use Historical Prices..... 6-37
6.2.4	Use Pricing Yardsticks 6-41
6.2.5	Use Government Estimates 6-46
CHAPTER 7. CALCULATE THE SHOULD-PAY PRICE	
7.1	Price Index Numbers..... 7-7
7.1.1	Construct Price Index Numbers 7-8
7.1.2	Use Government and Commercial Indexes 7-10
7.1.3	Adjust Prices for Inflation/Deflation..... 7-15
7.2	Trend Analysis..... 7-23
7.2.1	Analyze General Price Changes 7-25
7.2.2	Analyze Other Pricing Relationships 7-27
7.3	Price-Volume Analysis 7-29
7.3.1	Review Cost-Volume-Profit Analysis Concepts 7-30
7.3.2	Use of Linear Price-Volume Relationship - Algebraic Analysis..... 7-32
7.3.3	Use of Linear Price-Volume Relationship - Graphic Analysis 7-39
7.4	Cost Estimating Relationships (CERs) 7-45
7.4.1	Use Rule of Thumb..... 7-47
7.4.2	Develop Cost Estimating Relationships (CERs) 7-48
7.4.3	Estimate Should-Pay Prices 7-52
7.5	Ratio of Price to Estimated Direct Cost 7-55
7.5.1	Estimate the Ratio of Price/Identifiable Direct Cost..... 7-56
7.5.2	Estimate Should-Pay Price 7-57

	PAGE
CHAPTER 8. ACCOUNT FOR DIFFERENCES	
8.1 Reasons for Differences.....	8-7
8.1.1 Vendor Differences	8-8
8.1.2 Market Differences	8-18
 CHAPTER 9. PRICE-RELATED DECISIONS IN SEALED BIDDING	
9.1 Examine Individual Bids.....	9-5
9.1.1 Suspected Mistakes in Bids	9-6
9.1.2 Unbalanced Bids	9-13
9.2 Determine Need to Cancel the IFB.....	9-15
9.2.1 Price-Related Reasons for Canceling the IFB	9-16
9.2.2 Negotiation After Cancellation.....	9-22
 CHAPTER 10. PRICE-RELATED DECISIONS IN NEGOTIATIONS	
10.1 Determine the Need for Cost Data.....	10-7
10.1.1 Cost Analysis in Support of Price Analysis	10-8
10.1.2 Certified Cost or Pricing Data.....	10-10
10.2 Determine the Need for Discussions	10-13
10.2.1 Determine Price Without Discussions	10-16
10.3 Determine the Competitive Range.....	10-19
10.4 Determine the Need for Fact-Finding.....	10-25
10.4.1 Review Technical Requirements and Offeror Understanding	10-26
10.4.2 Identify Areas of "Gold Plating" for Possible Elimination.....	10-28
10.5 Establish Pre-Negotiation Price Positions	10-31
10.5.1 Analyze Risk	10-32
10.5.2 Develop Negotiation Positions.....	10-33
10.6 Consider Potential Trade-Offs Between Price and Other Terms	10-37
10.7 Determine the Need to Cancel and Resolicit.....	10-39

TABLE OF CONTENTS

	PAGE
CHAPTER 11. DOCUMENTATION	
11.1 Document Pricing Actions in Sealed Bidding.....	11-7
11.1.1 Record All Bids.....	11-8
11.1.2 Record the Reasons for Rejection of Bids	11-14
11.1.3 Record How Any Ties Were Broken	11-17
11.1.4 Identify the Basis for Considering the Award Price Reasonable	11-18
11.2 Document Pricing Actions in Negotiations	11-19
APPENDICES	
Appendix A Glossary	A-1
Appendix B Acronyms	B-1
Appendix C FAR References	C-1
Appendix D Index of Course Topics.....	D-1

PREFACE

PREFACE

THE FEDERAL ACQUISITION INSTITUTE (FAI) CURRICULUM

The Courses

In FY91, the FAI began providing Federal acquisition trainers and educators with instructional materials for a new Contract Management curriculum. This curriculum includes the following courses, listed in a recommended order of attendance.

1. Introduction to Contracting*
2. Procurement Planning*
3. Small Purchases
4. Contracting By Sealed Bidding*
5. Price Analysis*
6. Contracting By Negotiation**
7. Cost Analysis*
8. Negotiation Techniques
9. Government Contract Administration**
10. Government Contract Law
11. Types of Government Contracts
12. Source Selection
13. Advanced Procurement Management
14. Advanced Cost and Price Analysis
15. Advanced Contract Administration
16. Termination

Specialized Courses

(in alphabetical order)

1. ADP Contracting
2. Contracting for Architect/Engineer Services
3. Construction Contracting**

Offerors

Each of the above courses will be offered by the General Services Administration Interagency Training Center. Other Federal acquisition trainers and educators may incorporate FAI instructional materials in their respective curricula (generally under different course titles than the above).

* Currently available.

** Available in Fiscal Year 1992.

PURPOSE OF THE FEDERAL ACQUISITION INSTITUTE CURRICULUM

To Help You Accomplish The Goals Of The Federal Acquisition Process:

As a Contract Specialist, your primary goals are to:

1. Obtain the optimum market response to requirements for supplies and services, in terms of:

- Quality.
- Timeliness.
- Price.

While—

- Accomplishing socioeconomic objectives.
- Minimizing business and technical risks.
- Maximizing competition.
- Maintaining integrity.

2. Assure that purchased supplies and services are:

- Delivered or performed when and where specified in the contract.
- Acceptable, in terms of conforming to the contract's specifications or statement of work.
- Promptly and properly reimbursed.
- Furnished in compliance with other terms and conditions of the contract.

To Help You Perform Your Duties

To accomplish these goals, Contract Specialists perform more than 75 principal duties. Collectively, these duties constitute the Federal acquisition process. *Exhibit P-1* maps the acquisition process and relates each duty to the overall process. The FAI curriculum has been designed to systematically develop your skill at every duty in *Exhibit P-1*, in the context of accomplishing the overall goals of the Federal Acquisition Process.

Your Challenge

Your challenge is to become proficient at the duties in *Exhibit P-1*. Granted, you may presently perform only a subset of the duties. In terms of your career, however, learning the entire range of duties will improve your competitiveness for a great variety of contracting positions, including managerial positions. From the standpoint of the Government, you will be better able to perform any one duty if you have first hand knowledge of how the duty affects, and is in turn affected by, the performance of the other duties.

PRESOLICITATION PHASE

Determination of Need	Initiating the Procurement	Analysis of Requirement	Sourcing
<p>Determining Needs</p> <ol style="list-style-type: none"> 1. Forecasting Requirements 2. Acquisition Planning 	<p>Processing the PR</p> <ol style="list-style-type: none"> 3. Purchase Requests 4. Funding <p>Market Research</p> <ol style="list-style-type: none"> 5. Market Research 	<p>Analyzing Requirements</p> <ol style="list-style-type: none"> 6. Specifications 7. Statements of Work 8. Services 	<p>Extent of Competition</p> <ol style="list-style-type: none"> 9. Sources 10. Set-Asides 11. 8(a) Procurements 12. Competition Requirements 13. Unsolicited Proposals <p>Selection Factors</p> <ol style="list-style-type: none"> 14. Lease vs. Purchase 15. Price Related Factors 16. Technical Evaluation Factors <p>Method and Plan for the Procurement</p> <ol style="list-style-type: none"> 17. Method of Procurement 18. Procurement Planning

POST-AWARD ADMINISTRATION PHASE

Start-Up	Quality Assurance	Payment and Accounting	Closeout
<p>Planning</p> <ol style="list-style-type: none"> 54. Contract Administration Planning 55. Post-Award Orientations <p>Ordering</p> <ol style="list-style-type: none"> 56. Ordering Against Contracts and Agreements <p>Subcontracting</p> <ol style="list-style-type: none"> 57. Consent to Sub-contracts 	<p>Monitoring and Problem Solving</p> <ol style="list-style-type: none"> 58. Monitoring, Inspection, and Acceptance 59. Delays 60. Stop Work 61. Remedies <p>Property</p> <ol style="list-style-type: none"> 62. Property Administration <p>Reporting Performance Problems</p> <ol style="list-style-type: none"> 63. Reporting Performance Problems 	<p>Payment</p> <ol style="list-style-type: none"> 64. Limitation of Costs 65. Payment 66. Unallowable Costs 67. Assignment of Claims 68. Collecting Contractor Debts 69. Progress Payments 70. Price and Fee Adjustments <p>Accounting</p> <ol style="list-style-type: none"> 71. Accounting and Cost Estimating Systems 72. Cost Accounting Standards 73. Defective Pricing 	<p>Closeout</p> <ol style="list-style-type: none"> 74. Closeout

Exhibit P-1

SOLICITATION-AWARD PHASE

Solicitation	Evaluation— Sealed Bidding	Evaluation— Negotiation	Award
<p>Terms and Conditions</p> <p>19. Contract Types 20. Letter Contracts 21. Contract Financing 22. Use of Government Property and Supply Sources 23. Need For Bonds 24. Solicitation Preparation</p> <p>Soliciting Offers</p> <p>25. Publicizing Proposed Procurements 26. Preaward Inquiries 27. Prebid/Preproposal Conferences 28. Amending Solicitations 29. Cancelling Solicitations</p>	<p>Bid Evaluation</p> <p>30. Processing Bids 31. Bid Acceptance Periods 32. Late Offers 33. Bid Prices 34. Responsiveness</p>	<p>Proposal Evaluation</p> <p>35. Processing Proposals 36. Technical Evaluation 37. Price Objectives 38. Cost and Pricing Data 39. Audits 40. Cost Analysis 41. Evaluating Other Terms and Conditions 42. Competitive Range</p> <p>Discussions</p> <p>43. Factfinding 44. Negotiation Strategy 45. Conducting Negotiations</p>	<p>Selection for Award</p> <p>46. Mistakes in Offers 47. Responsibility 48. Subcontracting Requirements 49. Preparing Awards</p> <p>Executing Awards</p> <p>50. Award 51. Debriefing</p> <p>Protests</p> <p>52. Protests</p> <p>Fraud and Exclusion</p> <p>53. Fraud and Exclusion</p>

POST-AWARD ADMINISTRATION PHASE (Cont.)

Contract Modification	Termination	Claims	
<p>Modifications/Options</p> <p>75. Contract Modifications</p>	<p>Termination</p> <p>76. Termination 77. Bonds</p>	<p>Claims</p> <p>78. Claims</p>	

Exhibit P-1

PREFACE

CHARACTERISTICS OF FAI COURSES

- Each course in the curriculum builds on the skills and knowledge taught in prior courses.
- Each course covers specific duties and is designed to provide skill in performing those duties.
- Generally, there is a separate lesson for each duty, with a corresponding chapter in the Text/Reference.
- In most cases, your instructor will introduce the duty, its purpose (learning objective), applicable policies, and standards for performance.
- Next, the instructor will walk you through a flowchart of the steps in performing the duty.
- You will perform selected steps in-class, using case studies and other such exercises.
- You will be tested.
- For each duty, the Text/Reference serves as a desk reference, with flowcharts, steps in performance, and job aids.
- Practicums (i.e., self-instructional exercises) will be available at a later date to reinforce the in-class learning back on-the-job.
- Specialized courses (e.g., Construction Contracting) do not reteach the basic acquisition process, but rather concentrate on the unique regulations and procedures related to acquiring that type of deliverable.

OVERVIEW OF PRICE ANALYSIS

Duties. The following are among the duties from *Exhibit P-1* covered in this course:

<i>Duty</i>	<i>Chapter(s)</i>	<i>Focus:</i>
Purchase Requests	1	Planning the acquisition (reviewing Independent Government Cost Estimates)
Market Research	1	Planning the acquisition (researching acquisition histories and price-related market data)
Sources	2	Maximizing price competition
Analyzing Requirements	2	Maximizing price competition
Solicitation Preparation	2	Maximizing price competition
Publicizing Proposed Procurement	2	Maximizing price competition
Cost and Pricing Data	3	Data requirements and exemptions
Price Related Factors	4	Selecting price-related factors for award
Bid Prices Price Objectives	5 - 8	Applying price-related factors; selecting price analysis techniques; calculating the should-pay price; accounting for differences (between offers and the should-pay price)
Mistakes in Offers	10	Price-related decisions in sealed bidding
Canceling Solicitations	9-10	Price-related decisions in sealed bidding and negotiations
Competitive Range	10	Price-related decisions in negotiations
Factfinding	10	Price-related decisions in negotiations
Negotiation Strategy Conducting Negotiations	10	Price-related decisions in negotiations
Preparing Awards	11	Documentation

Length

One week (5 days)

Who Should Attend

Contract Specialists (GS-5 to GS-9) who have completed the following three courses (or an equivalent course or courses, such as Management of Defense Acquisition Contracts Basic):

- Introduction to Contracting
- Procurement Planning
- Contracting By Sealed Bidding

PREFACE

USING THE TEXT / REFERENCE IN THE CLASSROOM

Classroom Learning Objectives (CLOs)

At the beginning of each chapter, we have listed the classroom learning objectives for that chapter. We have written the text/reference to provide you with the information necessary to accomplish those objectives. Likewise, the classroom instruction and exercises are designed to help you attain those objectives.

Most of the objectives are written in terms of your performance of a duty or task. For example, The Text/Reference provides a step by step guide to performing the duties. In the classroom, you will have opportunities to practice performance of the duties—using the Text/Reference as your guide—through the use of such instructional techniques as interactive viewgraphs and case studies.

Interactive Viewgraphs

An interactive viewgraph is a slide on the overhead projector that requires a response from the class. For example, if the instructor is showing a decision table, the “then” side would be empty and you would help fill in the answers. Or perhaps the slide asks a particular question about a list of conditions shown on the slide. Most viewgraphs are represented in the Text/Reference as Exhibits.

Case Studies

Case studies are written as scenarios or stories about particular procurement situations. There are several questions that follow the scenarios relating to the case and the particular lesson. Sometimes you have to use information in the Text/Reference to complete a case study.

Reading Assignments

You are responsible for assigned readings from the chapters. You will spend minimal time listening to lectures. Our philosophy is that you learn best by doing the tasks under simulated conditions.

Testing

There will be one written test. It will contain approximately 50 questions and will be administered on the last day of class. Test items are taken only from the readings assigned by your Instructor.

The test should take no more than 75 minutes. All test questions were developed to verify the learning acquired from the course learning objectives which appear on the first page of each chapter in the Text/Reference.

USING THE TEXT / REFERENCE AT YOUR JOB SITE

The Text/Reference was developed to be used at your job site as well as in the classroom. Its step by step approach, FAR references, structured writing, and index are all designed for the easy and quick retrieval of information about the contracting process. Each Text/Reference is "dated" by indicating which FAC of the FAR system it is current through. This lets you know exactly how up to date it is. You may contact the FAI for updates or annotate your own copy as FAR policy changes.

COMMENTS

The book has not yet been written that does not contain some typos, incorrect citations, missing information, or technical inaccuracies. If this book is helpful to you, and you would like to help make it better, please send any corrections you recommend to the Federal Acquisition Institute (FAI) in care of GSA-VF, 18th and F Sts., NW, Washington, DC, 20405.

PREFACE

ABOUT THE FAI

As directed by the Office of Federal Procurement Policy Act, as amended, the Federal Acquisition Institute (FAI) has been working for more than a decade to (1) foster and promote Government-wide career management programs for a professional procurement work force; and (2) promote and coordinate Government-wide research and studies to improve the procurement process and the laws, policies, methods, regulations, procedures, and forms relating to procurement by the executive agencies.

For example, the FAI over the years has:

- Published annual demographic reports on the Federal acquisition workforce, showing trends in qualifications, turnover, and hiring.
- Developed and published guidance for the consideration of Federal Procurement Executives in establishing the procurement career management programs required by the Office of Federal Procurement Policy Act, as amended.
- Assisted colleges and universities in establishing courses and programs in acquisition disciplines, published directories of such academic courses and programs, and reviewed the equivalency of those courses and programs in meeting Federal training requirements.
- Supported the Office of Personnel Management (OPM) in developing standards and examinations for acquisition positions.
- Assisted Federal managers and supervisors in identifying and recruiting highly qualified candidates for acquisition fields (e.g., by publishing recruiting brochures, preparing other recruitment materials, coordinating recruitment at selected colleges, etc.).
- Developed a Contract Specialist Workbook, as a desk reference for performing 78 core Contract Management duties.
- Developed instructional materials (including this and other text/references, instructor guides, and test/banks) for Contract Management courses.
- Assisted agencies in establishing competency-based training, education, and certification programs.
- Developed and field tested a staffing standards model for contracting activities.

ABOUT THE GSA INTERAGENCY TRAINING CENTER

The U.S. General Services Administration (GSA) was founded to serve other Federal agencies, State and local governments, and the public. An important part of this service is helping governmental groups to fulfill their missions. The GSA Interagency Training Center supports other agencies' missions by providing quality training to their employees. For Federal acquisition specialists, the Interagency Training Center provides courses in the knowledge, skills, and abilities necessary to perform their duties.

To find the GSA Interagency Training Center courses most useful to your mission, consult *The GSA Interagency Catalog and Schedule*, which is published annually. For copies, contact the GSA Interagency Training Center by phone or letter at:

**GSA Interagency Training Center
P.O. Box 15608
Arlington VA 22215-0608
FTS 703 557-0986**

INTRODUCTION

PRICES AND PRICING

Learning Objectives

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective I/1

Identify typical sellers' pricing objectives in a market.

Classroom Learning Objective I/2

Identify the key elements of the Government's pricing objective.

Classroom Learning Objective I/3

Identify the two basic approaches and the elements to contract pricing: price analysis and cost analysis.

Classroom Learning Objective I/4

Identify potential participants in the price analysis and the types of assistance each can provide.

Chapter Overview

Introduction

An important part of your job as a contract specialist is to conduct the price analyses necessary to ensure that the Government purchases supplies and services from responsible sources at fair and reasonable prices. To begin your study of contract pricing, you will examine the general pricing environment. You will consider the following:

- Definition of Price
 - Seller's Pricing Objectives
 - Seller's Approaches to Pricing a Contract
 - Buyer's Pricing Objectives
 - Buyer's Approaches to Pricing the Contract
-

Definitions of "Price"

From both work and personal business dealings, most people think of price as:

"the amount of money that a buyer pays a seller for the delivery of a product or the performance of a service."

FAR 15.801

The definition of price in FAR 15.801 emphasizes its components:

"cost plus any fee or profit applicable to the contract type."

In this course, both definitions of price are important. Primarily, price is defined as the amount the buyer pays for a product or service. However, it is important to remember that, if prices do not cover supplier costs and provide a profit, losses will occur. A firm that is losing money is typically an unreliable supplier—possibly a bankrupt supplier.

(Continued on next page)

Overview (Continued)

In this chapter

This chapter covers the following topics:

SECTION	DESCRIPTION	SEE PAGE
A	I.1 Determine the Seller's Pricing Objectives and Approaches	I-5
	I.1.1 Determine the Seller's Pricing Objectives	I-6
	I.1.2 Determine the Seller's Approaches to Pricing	I-7
	I.1.3 Review Seller's Cost-based Pricing Strategies	I-8
	I.1.4 Review Seller's Market-based Strategies	I-15
B	I.2 Identify Government's Pricing Objective	I-25
	I.2.1 Pay a Fair and Reasonable Price	I-27
	I.2.2 Identify Markets and Pricing Advantage	I-29
	I.2.3 Price Each Contract Separately	I-31
	I.2.4 Exclude Contingencies	I-33
C	I.3 Identify Government's Approaches to Contract Pricing	I-35
	I.3.1 Perform Price Analysis	I-37
	I.3.2 Perform Cost Analysis	I-38
D	I.4 Identify Potential Participants In The Price Analysis	I-39
	I.4.1 Potential Participants	I-40
	I.4.2 Types of Assistance	I-41

SECTION A

STEP 1:

I.1 DETERMINE THE SELLER'S PRICING OBJECTIVES AND APPROACHES

Overview

Introduction

Buyers and sellers look at the same price from different perspectives. Each party to a sales transaction has unique pricing objectives. As contract specialists, you should be aware of the difference in pricing perspectives between buyers and sellers.

In this section

This section covers the following topics:

TOPIC	SEE PAGE
I.1.1 Determine the Seller's Pricing Objectives	I-6
I.1.2 Determine the Seller's Approaches to Pricing	I-7
I.1.3 Review Seller's Cost-based Pricing Strategies	I-8
I.1.4 Review Seller's Market-based Strategies	I-15

I.1.1 Determine Seller's Pricing Objectives

Introduction

Pricing Objectives. To sellers, contract pricing has two primary, related objectives:

- To cover costs
 - To contribute to attaining corporate operational objectives
-

Cover Costs

Obviously, a firm that cannot cover its costs cannot survive. Many firms would have us believe that they lose money on every unit they sell, but make up for it in volume. Unfortunately, business does not work that way.

Corporate Operational Objectives

Every firm has a set of operational objectives. Clear objectives are necessary to assure profitability. Examples include:

- Short-term and/or long-term profitability
- Market share
- Long-term survival
- Product quality
- Technological leadership
- High productivity

To attain its operational objectives, a firm must cover its costs and earn an overall profit. Some products may sell for less than cost, but if they do, other products must make sufficient profit to compensate for those losses. Profits are essential for:

- Investment
 - Product Development
 - Productivity Improvement
 - Retirement of Debt Principal,
 - Rewarding Investors.
-

I.1.2 Determine Seller's Approaches to Pricing

Seller's Pricing Approaches

In pricing products, sellers use two basic approaches. The table below compares the two approaches to pricing.

Pricing Approaches	Strategies
<ul style="list-style-type: none"> • Cost based pricing: 	<ul style="list-style-type: none"> • Mark-Up Pricing • Margin on Direct Cost • Rate of Return Pricing
<ul style="list-style-type: none"> • Market-based pricing: 	<ul style="list-style-type: none"> • Profit-Maximization Pricing • Market-Share Pricing • Market Skimming • Current-Revenue Pricing • Target-Profit Pricing • Promotional Pricing • Demand-Differential Pricing • Market-Competition Pricing

I.1.3 Review Seller's Cost-based Pricing Strategies

Introduction

Cost-based Pricing. This approach to pricing involves an analysis of a firm's cost to produce a product, and the addition of a reasonable profit to determine the selling price.

What is a reasonable profit? There is no single answer to that question. What is reasonable to the seller depends on many factors, including:

- Competition
- Objectives of the firm
- Necessary investment
- Risk involved

Cost-based Pricing Strategies

Calculating and applying profits. How is profit calculated and applied? There are three basic strategies:

- Mark-up Pricing
 - Margin on Direct Cost
 - Rate-of-return Pricing
-

Mark-up Pricing

Definition

Mark-up Pricing is the establishment of prices based on direct cost or total cost plus a percentage mark-up. If the base is direct cost, the mark-up covers profit plus indirect costs (i.e., overhead and general and administrative costs). If the base is total cost, the mark-up only covers profit. When discussing mark-up percentages, you must know whether the firm's mark-up is against direct or total costs.

Procedure

To understand mark-up pricing, you must understand the steps followed by a firm when using the technique:

STEP	ACTION
1	Estimate the sales volume
2	Estimate product unit cost at the estimated sales volume
3	Determine the mark-up rate to be used
4	Calculate unit selling price by applying the mark-up rate to the product cost

Example

Price the following product using straight mark-up pricing:

Given:

Estimated Sales Volume = 1,000 units

Estimated Unit Cost = \$80

Mark-up Rate = 20%

Calculate Unit Selling Price:

Unit Selling Price = Cost + (Mark-up Rate x Cost)
 = \$80 + (0.20 x \$80)
 = \$80 + \$16
 = \$96

(Continued on next page)

Mark-up Pricing (Continued)

Strategy
Implications for
Buyers

Profit is set as a percentage of cost. Mark-up rates depend on the product line tradition, competition, and other factors. Similar products are priced using similar mark-up rates. They typically do not consider the investment required to produce the product.

Mark-up pricing is often used in industries that expect customers to negotiate the sales price (e.g., cars). The profit represented in the mark-up is set high enough to provide the seller with room to compromise. Hence, a good buyer should be aware of relevant industry mark-up practices. Knowledge of prevailing mark-ups can be a tremendous advantage in negotiating reasonable prices.

Mark-up pricing is also often used when a product is being designed, modified or produced (or a unique, one of a kind service is being performed) for a single customer (or a small group of customers).

Mark-Up on Direct Costs. A firm that bases its mark-up on direct cost will have a higher mark-up than the firm that bases the mark-up on full cost. Why? Because the mark-up rate must cover overhead costs, as well as profit. A mark-up rate of 100 percent or more may be quite reasonable.

Mark-Up on Total Costs. A firm that bases its mark-up on full costs should have a lower mark-up rate than the firm that bases the mark-up on direct cost only. A mark-up rate of 100 percent on full cost would normally be considered excessive.

Margin on Direct Cost Pricing

Definition

Margin on Direct Cost Pricing is similar to mark-up pricing in that price is based on the relationship between cost and profit. Because the margin is based on direct cost, it covers both indirect costs and profit. Instead of adding a mark-up based on a percentage of cost, margin pricing uses direct cost data to calculate a price that will provide a profit margin that is an established percentage of price. Many commercial firms use this technique because it matches their accounting reports where costs and profits are reported as a percentage of sales.

Procedure

Use the following steps to calculate price based on the margin on direct cost pricing technique:

STEP	ACTION
1	Estimate the sales volume
2	Estimate direct cost at the estimated sales volume
3	Determine the margin rate to be used
4	Calculate the selling price by applying the margin rate to the product cost

Example

Price the following product using margin on direct cost pricing:

Given:	
Estimated Sales Volume	= 1,000 units
Estimated Unit Direct Cost	= \$81
Margin Rate	= 40%
Calculate Unit Selling Price:	
Unit Selling Price	= $\frac{\text{Cost}}{(1 - \text{Margin Rate})}$
	= $\frac{\$81}{(1 - .40)}$
	= $\frac{\$81}{.60}$
	= \$135

(Continued on next page)

Margin on Direct Cost Pricing (Continued)

Strategy
Implications for
Buyers

Like mark-up rates, margin rates depend on the product line, tradition, and competition. Similar products are priced using similar mark-up rates. A firm's management is often rated by the margin rate that they can obtain.

A good buyer should be aware of relevant industry mark-up practices. Knowledge of prevailing margins can be a tremendous advantage in negotiating reasonable prices, especially when buying in commercial markets.

Rate-of-return Pricing

Definition

Rate-of-return Pricing is also similar to mark-up pricing in that profit dollars are added to estimated costs. However, when using this pricing method, you base profit dollars on the desired return on investment, rather than on estimated cost.

Procedure

Follow these steps to determine profit using rate-of-return pricing:

STEP	ACTION
1	Determine desired rate of return on investment
2	Estimate investment required
3	Estimate level of sales
4	Estimate unit cost at the projected sales level
5	Calculate desired unit profit
6	Calculate unit selling price (estimated cost + desired profit)

Example

Price the following product using rate-of-return pricing:

Given:	
Desired Rate of Return	= 15%
Estimated Investment Required	= \$600,000
Estimated Sales	= 5,000 units
Estimated Unit Total Cost	= \$80
Calculate Unit Selling Price:	
Calculate Desired Unit Profit	= $\frac{15\% \text{ of } \$600,000}{5,000 \text{ units}}$
	= $\frac{90,000}{5,000 \text{ units}}$
	= \$18 per unit
Calculate Unit Selling Price (Unit Cost + Unit Profit)	= \$80 + \$18 = \$98

(Continued on next page)

Rate-of-return Pricing (Continued)

Strategy
Implications for
Buyers

In rate of return pricing, profit is set based on investment, desired rate of return, and projected sales. Firms that use this method of pricing are probably more sensitive to changes in overall sales volume than firms using the other cost-based pricing methods. They are concerned about the rate of return, not just a mark-up or margin rate. A lower item price coupled with a higher sales volume can actually increase the rate of return. On the other hand, a higher item price coupled with a lower sales volume can decrease the rate of return.

I.1.4 Review Seller's Market-based Pricing Strategies

Introduction

Market-based Pricing. In a competitive market, the seller must consider the four "P"s of marketing: price, product, place, and promotion. Firms must develop pricing strategies to accomplish overall marketing objectives based on their assessment of market conditions (e.g., forecasts of supply and demand) and the economic condition of the business entity.

Market-based Pricing Strategies

The following market-based pricing strategies can be used in various market conditions:

- Profit-Maximization Pricing
 - Market-Share Pricing
 - Market Skimming
 - Current-Revenue Pricing
 - Target-Profit Pricing
 - Promotional Pricing
 - Demand-Differential Pricing
 - Market-Competition Pricing
-

Profit-maximization Pricing

Definition In **Profit-maximization Pricing**, the seller assumes that demand falls as prices increase, and grows as prices decrease. A firm using this strategy carefully analyzes the market to find the combination of price per unit and quantity of sales that maximizes profit.

Strategy When employing this strategy, the seller considers the following points:

- Is demand sensitive to price changes?
 - As price increases, does demand decrease?
 - As price decreases, does demand increase?
- What is the point of profit maximization? This is determined through analysis of the relationship between price and demand.

This pricing strategy is **most effective** in situations where:

- Price is an important marketing factor affecting demand.
- Competitors react relatively slowly to price changes.
- Suppliers and dealers react relatively slowly to price changes.
- Actual relationships between price and customer demand can be effectively estimated.

The profit-maximization strategy is relatively **ineffective** when the market reacts rapidly to all changes in marketing mix.

Strategy Implications for the Buyer

This method of pricing is not commonly seen in Government contracting. In Government contracting, the purchase quantity estimates are generally fixed, based on the needs of the Government. No matter how low the offeror's price, the quantity acquired by the Government does not change. Thus, there is no advantage to the offeror to offer price lower than that necessary to win the contract.

Prices in multiple award Federal Supply Schedules are a possible exception. Another possible exception are inventory buys, when the amounts ordered by inventory managers vary from one period to the next based in part on price/quantity tradeoffs.

Be aware of the relationship between price and quantity in the marketplace. Working with users to take advantage of price breaks can save the Government substantial sums of money.

Market-share Pricing

Definition

Market-share Pricing is based on the assumption that long-run profitability is associated with market share. When using this strategy, the goal is to dominate the market through market penetration. Firms set prices relatively low to win customers and discourage competition. Early losses may occur, but as volume increases, cost per unit decreases and long-term profits are achieved.

Strategy

When employing this strategy, the seller considers the following points:

- Build efficient production facilities
 - Set price at or below competitors' prices to win market share
 - Lower prices as costs fall
-

Strategy
Implications for
the Buyer

As a buyer, you should encourage mass production efficiencies that may reduce contractor costs and provide a reasonable profit, while limiting effective competition. The model T Ford is one example. Ford drove down prices to reach more customers.

You should discourage a contractor "**buy-in,**" i.e., bid below cost, to win a contract and exclude others from the market, when there is evidence that the contractor may go bankrupt because the contract price will not cover costs (or is otherwise like to minimize losses by cutting corners on quality or delivering late). You should be particularly concerned when sellers:

1. Have limited financial resources, or
2. Are apparently gambling on capturing a larger share of the market (and of unit sales) than is likely.

Note: Companies that switch from a "market skimming" to a "market-share" pricing strategy often see their overall profits drop alarmingly despite increases in unit sales.

Market Skimming

Definition

In **Market Skimming**, prices are set to achieve a high profit on each unit by selling to buyers who are willing to pay a higher price for a product of perceived higher value. After the demand of these buyers is satisfied, or competitors produce similar products at lower prices, prices may be reduced to increase volume and maintain overall profitability.

Strategy

When employing this strategy, the seller considers the following points:

- Establish a high price to achieve a high profit margin at relatively low volume.
- Decrease price over time to attract buyers not willing to pay the price premium.

IBM PC and Apple Macintosh computers are good applications of this strategy:

- Prices remained relatively high for years
 - Firms catered to buyers willing to "pay for the best"
 - As quality competition increased, prices began to decrease
-

Strategy Implications for the Buyer

As a buyer, you should resist user attempts to "pay for the best" when the "best" is more than the Government needs or the perception of quality is based more on superior marketing than on a superior product.

You should encourage attempts at source development to increase competition and control prices.

Current-revenue Pricing

Definition

In **Current-revenue Pricing**, the emphasis is on maximization of current revenue rather than profit of long-term revenue. Firms using this strategy are typically concerned about long-term market uncertainty or the firm's financial instability. To them, a sure dollar today is much more important than the possibility of more dollars tomorrow.

Strategy

When employing this strategy, the seller considers the following point:

- Determine the price/quantity combination that maximizes revenue.

Strategy Implications for the Buyer

You need to be aware that this strategy predominates when risk is high. Action to reduce risk will likely be rewarded with lower prices and a more stable business environment.

Firms pricing product crazes, like the "hula hoop," are likely to consider current-revenue pricing.

- Demand is high one day, but may disappear the next
- Near-term cash recovery is more important than long-term profitability

Firms with limited financial resources may also employ this strategy.

- If near-term cash needs are not met, there will be no long term for the firm
 - Unfortunately, concentration on the near-term may also jeopardize the long-term future of the firm
-

Target-profit Pricing

Definition

Target-profit Pricing is an application of return-on-investment pricing to the competitive market. Product decisions are based on the expected rate of return.

Strategy

When employing this strategy, the seller considers the following points:

- Determine price based on cost-based rate-of return calculations.
 - Reject products that cannot earn the required rate of return.
-

Strategy
Implications for
the Buyer

While this strategy can be applied in very competitive situations, it has most effective application in markets where there is some degree of product differentiation. For example:

- General Motors has a history of pricing automobiles to achieve 15 to 20 percent return-on-investment.
- Public utility prices are typically set based on prescribed rates of return.

Many firms are dropping Government sales because they believe that required rate of return cannot be attained. They believe that emphasis on competition, and initiatives like component break-out limit the profitability of developing and producing products for Government sales.

Promotional Pricing

Definition	In Promotional Pricing , products are priced to enhance the sales of the overall product line rather than to assure the profitability of each product.
Strategy	When employing this strategy, the seller considers the following points: <ul style="list-style-type: none">• Determine whether selling a product at a loss, loss leader, will increase the sale of related products and increase profit.• Determine whether selling a product at a high, prestige, price will improve the product-line quality image and increase profit.
Strategy Implications for the Buyer	<p>This strategy can be used for pricing a wide range of consumer and industrial products, from groceries to electronics and office products. You need to be aware of some of the forms promotional pricing can take.</p> <p>"Loss-leader" pricing is probably the most common example. The price of one, or a group of items, is reduced to near cost, or even below. Customers are attracted to buy the low-priced items and buy other related items at the same time.</p> <p>"Prestige" pricing uses a high-quality, high-priced item to enhance the image of an entire product line and attract more buyers.</p> <p>"Bait and switch" pricing is another version of this strategy. The buyer is lured to the seller by a low-priced item, and then switched to a "better" item during the sale.</p>

Demand-differential Pricing

Definition	In Demand-differential Pricing , products or services sold in different market segments are priced in a way that is not consistent with the marginal costs related to segment differences.
Strategy	When employing this strategy, the seller considers the following points: <ul style="list-style-type: none">• Identify the segmentation factors that may affect pricing:<ul style="list-style-type: none">- Customer- Product Form- Place- Time• Determine the demand intensity in each segment.• Identify actual and potential competitors.• Assure that demand-differential will not breed customer resentment.
Strategy Implications for the Buyer	You need to be aware of the effect of the various segmentation factors on different products. <ul style="list-style-type: none">• Customers may pay different prices based on buying power or negotiation skills—for example, automobile purchases. In addition, different classes of customers (e.g., wholesalers, retailers, and governments) may pay different prices.• Product-form such as electronic component assembly may warrant a price higher than the price of the components plus assembly.• Location of sale of the product may affect price. The price of an item sold in New York may be substantially greater than the price of the item in Ohio plus the shipping charge to New York.• Time may affect pricing, particularly in industries that have substantial fixed investment and identifiable peaks in demand. Utilities, for example, offer lower prices for service during "off peak" hours.

Market-competition Pricing

Definition

In **Market-competition Pricing**, emphasis is on competitive action/ reaction to pricing actions that competitors have taken or are expected to take. Firms following this pricing strategy in relatively homogeneous markets establish prices based on what the competition charges or what they think the competition is going to charge.

Strategy

You may find that different companies may set prices at a level that keeps pace with competitor's prices. When employing this strategy, the seller considers the following points:

- Determine competitor prices and/or anticipated prices.
- Set price to keep pace with competitor prices.

Major strategy applications include "sealed-bid" and "going-rate" pricing.

"Sealed-bid" pricing forces the seller to:

- Estimate what competitors will bid
- Determine what the seller can profitably bid
- Submit the bid knowing that it will be accepted or rejected without further discussion

"Going-rate" pricing requires the seller to:

- Determine what competitors are charging
- Establish product price within an established range of the competition.

Strategy
Implications for
the Buyer

Government policy on competition and market pricing is designed to encourage sellers to establish prices using market-competition pricing. You need to remember that this is only one method of market pricing. Many firms are reluctant to compete in a market where success is achieved by low price alone.

SECTION B

STEP 2:

I.2 IDENTIFY GOVERNMENT'S PRICING OBJECTIVE

Overview

Introduction

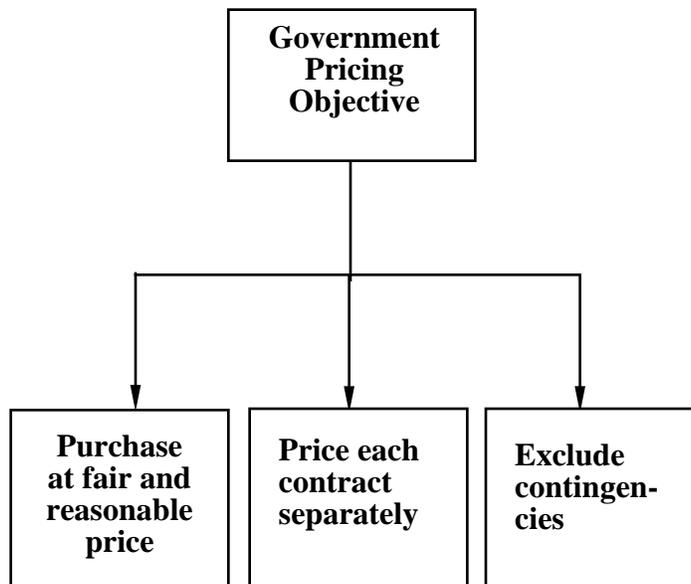
Your primary pricing objective is to acquire supplies and services from responsible sources at fair and reasonable prices.

FAR 15.802(b)

When awarding contracts through the negotiated procedures of FAR Part 15, you must also:

- Price each contract separately and independently and not (1) use proposed price reductions under other contracts as an evaluation factor, or (2) consider losses or profits realized or anticipated under other contracts.
 - Not include in a contract price any amount for a specified contingency if the occurrence or effect of the contingency cannot be equitably priced at the time of contract award.
-

Government Pricing Objective



(Continued on next page)

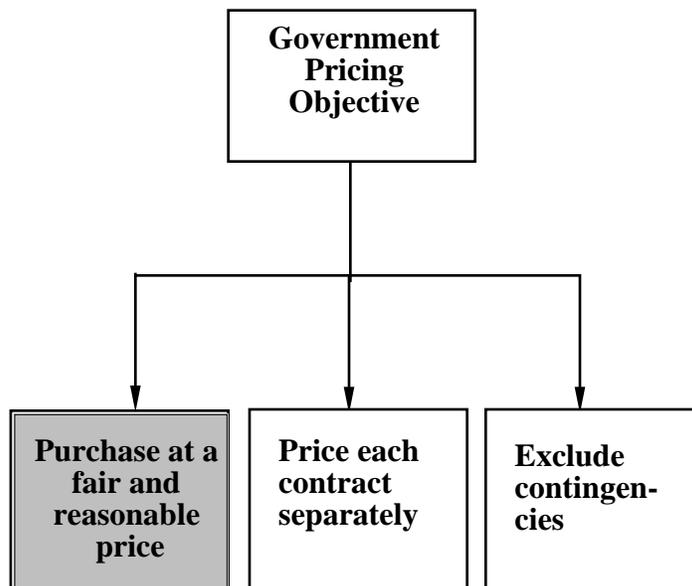
Overview (Continued)

In this section

This section covers the following topics:

TOPIC	SEE PAGE
I.2.1 Pay a Fair and Reasonable Price	I-27
I.2.2 Identify Markets and Pricing Advantage	I-29
I.2.3 Price Each Contract Separately	I-31
I.2.4 Exclude Contingencies	I-33

I.2.1 Pay a Fair and Reasonable Price



I.2.1 Pay a Fair and Reasonable Price

Introduction

The first element of the Government pricing objective requires that contract prices be "**fair and reasonable.**" To understand the phrase "fair and reasonable," you must consider two other questions:

- Fair to whom?
 - Reasonable under what circumstances?
-

What is "Fair and Reasonable?"

1. Fair to the Buyer.

In the case of a buyer, a fair price is a price that is: free from dishonesty or injustice, proper under the rules, and equitable. As a buyer, you would consider a price that is TOO HIGH to be unfair. What can happen if you agree to a price that is too high?

- You will waste scarce Government funds.
- You might become famous as the buyer who paid \$435 for a hammer.

2. Fair to the Seller

Why should you care if the price is not fair to the seller? Because an unrealistically low price puts both parties at risk. The risk to the Government is that the firm — to cut its losses — might:

- Cut corners on product quality.
- Deliver late.
- Default, forcing a time-consuming reprocurement.
- Refuse to deal with the Government in the future or be forced out of business entirely.

Firms are sometimes willing and financially able to perform satisfactorily for a price that is not likely to cover all of their costs. More often, an offer is unrealistically low because the offeror misunderstands the requirement or grossly underestimated the performance risks and probable costs. In that case, it would be unfair to the offeror (and to other good faith offerors) to accept the low offer. More importantly, award at that price would be "false economy if there is subsequent default, late deliveries, or other unsatisfactory performance ..."

FAR 9.103(c)

3. Reasonable Under Market Conditions

Economic forces such as supply, demand, competition, and general economic conditions change constantly. Hence, a price that is reasonable today may not be reasonable tomorrow.

(Continued next page)

I.2.1 Pay a Fair and Reasonable Price (Continued)

What is "Fair and Reasonable?,"
(Cont.)

The following are examples of the relationship between market conditions and prices.

- If demand is constant, decreasing supply usually results in higher prices, while increasing supply usually results in lower prices.
- If supply is constant, decreasing demand usually results in lower prices, while increasing demand usually results in higher prices.
- Competition is needed for the forces of supply and demand to work effectively; however, not all markets are competitive. When they are not, the buyer or seller may have an advantage in the pricing decision.
- Inflation and deflation affect the value of the dollar. Boom, recession, and depression affect general production capacity.

4. Reasonable Considering the Total Cost of the Acquisition

The total cost of an acquisition is more than the price of the contract. It also includes (1) direct costs of buying the item not included in contract price, (2) costs of ownership not included in contract price, and (3) the Government's overhead for awarding and administering the contract. All elements should be considered in an overall analysis of price reasonableness. Examples:

- **Direct Costs of Acquisition:** You receive two offers, both "f.o.b. origin"—which means that the Government will pay the costs of shipping the end item from the contractor's plant to a Government warehouse. Which offer represents the lowest total cost to the Government? To answer that question, you must consider both (1) the offered prices and (2) shipping costs not covered by the contract.
 - **Costs of Ownership.** You receive two offers to your solicitation for copiers. Copier #1 meets minimum specifications. Copier #2 is priced \$500 higher. However, Copier #2 is more reliable and less costly to repair. Data on average repair costs suggests that Copier #2 is likely to save the Government more than \$2,000 in repairs over the 3 year useful life of the copier. Buying Copier #2 would result in the lowest total cost to the Government.
 - **Costs of Contract Award and Administration.** You receive prices on 10 items from 12 firms. Awarding contracts to five different offerors would result in a total price that is \$300 less than awarding the entire requirement to Offeror #2. However, the cost to the Government of administering five contracts would greatly exceed the \$300 savings. Hence, Offer #2 represents the lowest total cost to the Government.
-

I.2.2 Identify Markets and Pricing Advantage

Introduction

Competition is needed for the forces of supply and demand to work effectively. When price competition does not exist, the buyer or seller has greater power in the pricing decision.

Markets
Classified
by Degrees of
Competition

Use the following table to classify economic markets according to these factors:

- buyers
- sellers
- products
- market entry/exit

LEVEL	BUYERS	SELLERS	PRODUCTS	MARKET ENTRY/EXIT
Perfect Competition	many independent	many independent	homogeneous interchangeable	relatively easy
Effective Competition	limited independent	limited independent	relatively homogeneous interchangeable	relatively easy
Oligopoly	many independent	few independent	increased product differentiation	restrictions
Oligopsony	few independent	many independent	relatively homogeneous interchangeable	relatively easy
Monopoly	many independent	one	highly differentiated	restrictions
Monopsony	one	many independent	relatively homogeneous	relatively easy
Bilateral Monopoly	one	one	differentiated	restrictions

(Continued on next page)

I.2.2 Identify Markets and Pricing Advantage (Continued)

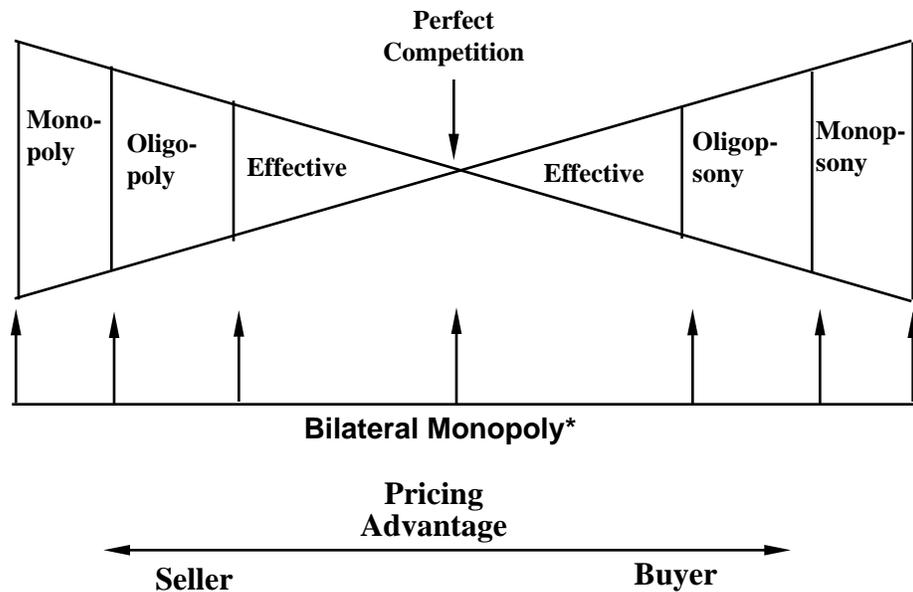
Pricing Power and Market Situations

Your relative power compared to that of sellers changes in different market situations. The table below presents seven different levels of competition:

MARKET	PRICING ADVANTAGE
Perfect Competition	Pricing balance between buyers and sellers
Effective Competition	Relative pricing balance between buyers and sellers
Oligopoly	Relatively greater pricing power to the seller
Oligopsony	Relatively greater pricing power to the buyer
Monopoly	Considerable pricing power to the seller
Monopsony	Considerable pricing power to the buyer
Bilateral Monopoly	Pricing power established by negotiation (as in sole source government negotiations)

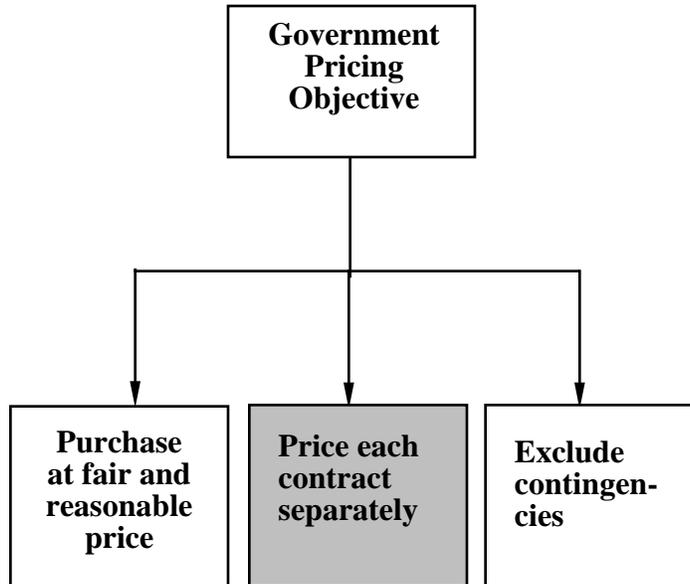
Relative Pricing Power

This diagram shows the relative pricing power in each market.



* Relative pricing power established by need and negotiation ability.

I.2.3 Price Each Contract Separately



Introduction

It is human nature to try to balance one contract against another in terms of financial results.

Seller's Perspective

A seller's position might be that , because the last contract lost money, an effort should be made to make up the loss on the next one.

Buyer's Perspective

A buyer's position might be that the contractor made too much profit on the last contract; therefore, the next contract must be structured to prevent this from happening again.

(Continued next page)

I.2.3 Price Each Contract Separately (Continued)

Government
Purchasing

While these attitudes may be understandable in a personal sense, they are not valid in Government purchasing.

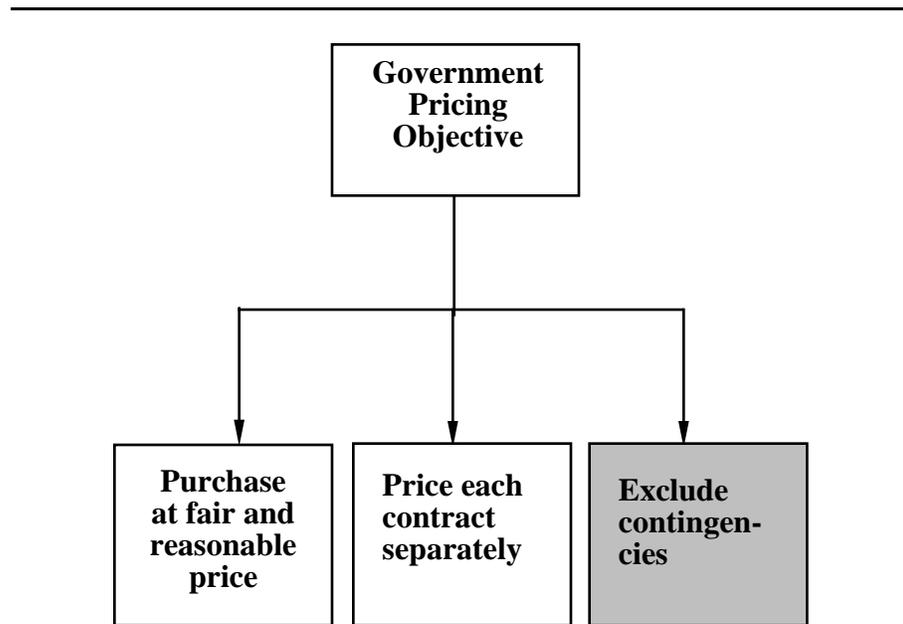
Government acquisition is very complex because:

- buyers and sellers do not have perfect knowledge of all transactions between a contractor and the Government
- the market forces of competition, supply, and demand change
- business conditions change

Conclusion

Thus, you must price each contract separately and independently to ensure that all proposed prices are fair and reasonable to all involved parties.

I.2.4 Exclude Contingencies



Introduction

In Government purchasing, part of the Government's total pricing objective is not to include, in a contract price, any amount for a specified contingency, if the occurrence or effect of the contingency cannot be equitably priced at the time of contract award.

Definition: Contingency

A **contingency** is a possible future event or condition arising from presently known or unknown causes, the outcome of which is not determinable at the present time.

Types of Contingencies

You should be aware of the two types of contingencies that are important in Government purchasing:

- Contingencies whose effects can be reasonably estimated within acceptable limits of accuracy
- Contingencies whose effects cannot be reasonably estimated equitably

(Continued next page)

I.2.4 Exclude Contingencies (Continued)

Pricing Decision

This table shows you how to handle each type of contingency in terms of the contract price:

CONTINGENCY	EXAMPLES	CONTRACT PRICE
Effect can be reasonably estimated	<ul style="list-style-type: none">• Cost of rejects• Cost of defective work	Effects should be included in contract price
Effect cannot be reasonably estimated	<ul style="list-style-type: none">• Winning or losing a lawsuit• Costs affected by court decision	Effects must be excluded from contract price and disclosed separately to permit negotiation of acceptable contract coverage

SECTION C

STEP 3:

I.3 IDENTIFY GOVERNMENT APPROACHES TO CONTRACT PRICING

Overview

Introduction:

The Government uses two basic approaches to contract pricing:

- Price analysis
 - Cost analysis
-

Definition: Price Analysis

FAR 15.801

Price Analysis is the process of examining and evaluating a proposed price to determine if it is fair and reasonable, without evaluating its separate cost elements and proposed profit.

When to Use Price Analysis

You must use price analysis for all purchases, whether or not a cost analysis is required. However, you will need to tailor the depth of price analysis to the size of the purchase. You will do this by considering the potential cost of overpricing and the administrative cost of performing price analysis. Price analysis is particularly effective when a viable competitive market is controlling the price.

Definition: Cost Analysis

FAR 15.801

Cost Analysis is the review and evaluation of (a) the separate cost elements and proposed profit of an offeror's or contractor's cost or pricing data, and (b) the judgmental factors applied by the offeror in projecting from the data to the estimated costs.

When to Use Cost Analysis

FAR 15.804

Cost analysis must be performed when offerors are required by FAR 15.804 to submit Certified Cost or Pricing Data. You will learn about the requirements for submission of Certified Cost or Pricing Data and exemptions from those requirements in Chapter 3.

Cost analysis can also be performed in situations where price analysis alone cannot establish price reasonableness or proposal realism. You will learn about situations that might require analysis of the bidder's pricing working papers in Chapter 9. Chapter 10 presents situations that might require cost analysis in negotiated procurements.

(Continued on next page)

Overview (Continued)

In this section

This section covers the following topics:

TOPIC	SEE PAGE
I.3.1 Perform Price Analysis	I-37
I.3.2 Perform Cost Analysis	I-38

I.3.1 Perform Price Analysis

Introduction

Besides the requirement that price analysis be performed for all purchases, there are two other key aspects of this process:

Bases of Comparison

Price analysis **always** involves some form of comparison with other prices. The specific bases you will use for price analysis are:

- Competitive bids or proposals
 - Catalog, market, or regulated prices
 - Prior proposed and/or contract prices
 - Rough yardsticks and cost estimating relationships
 - Independent Government estimates
-

User Evaluation Documentation

Price analysis equates prices to user evaluation; thus, price analysis is subjective in nature.

For any given purchase, different bases for price analysis may give the buyer a different view about whether a price is fair and reasonable.

Even given the same information, different buyers might make different decisions about price reasonableness.

It is YOU, the contracting officer/buyer, who must be satisfied that the price is reasonable.

Because of the subjective aspect of price analysis, documentation for later review is essential

I.3.2 Perform Cost Analysis

Introduction

FAR 15.804

You will be required to perform a cost analysis when FAR 15.804 requires offerors to submit Certified Cost or Pricing Data. Under certain circumstances, the contracting officer may also require submission and analysis of more limited data on elements of cost as described in Chapter 3.

Definition of
Cost or Pricing
Data

FAR 15.801

Cost or pricing data are all facts, as of the date of price agreement, that prudent buyers and sellers would reasonably expect to significantly affect price negotiations. Cost or pricing data are factual, not judgmental, and are therefore verifiable. While they do not indicate the accuracy of the prospective contractor's judgment about estimated future costs or projections, they do include the data on which that judgment is based. Cost or pricing data are more than historical accounting data; they are all the facts that can be reasonably expected to contribute to the soundness of estimates of future costs and to the validity of determinations already incurred.

Requiring and
Analyzing Data

FAR 15.804

In cost analysis, you will be required to analyze all data submitted.

In situations where Certified Cost or Pricing Data are required, you must analyze all data that support the total proposed price, including direct costs, indirect costs, and profit.

**(FAR 15.804-
6(a))**

In situations where Certified Cost or Pricing Data are not required, you may tailor data requirements and analysis to specific elements of the offer. You may restrict requirements to specific elements of cost such as direct costs. Alternatively, you may restrict requirements to a specific product component.

Cost Analysis as a
Supplement to
Price Analysis

FAR 15.804

Price analysis is required even when a cost analysis is performed. Cost analysis, by itself, cannot establish a reasonable price because it concentrates exclusively on costs and internal cost or pricing data. This can lead to bad pricing because these data do not necessarily provide any clue to what the costs should be, what the value of the products or services are, or what the price would likely be if determined through market competition.

SECTION D

STEP 4:

I.4 IDENTIFY POTENTIAL PARTICIPANTS IN THE PRICE ANALYSIS

Overview

Introduction

In some cases, you may need help from other personnel to analyze prices. This section speaks to the types of individuals who may be available to assist you.

In this section

This section covers the following topics:

TOPIC	SEE PAGE
I.4.1 Potential Participants	I-40
I.4.2 Types of Assistance	I-41

I.4.1 Potential Participants

Potential
Participants

For most contracts, you will have the support of:

- The Contracting Officer.
- A Requirements (i.e., Program or Project) Manager.

You might also obtain assistance from:

- Inventory Managers.
 - Technical Specialists.
 - Transportation, Property, and Logistics Managers.
 - Competition Advocates.
 - Legal Specialists.
 - Contract Administrators.
 - Cost/Price Analysts.
-

I.4.2 Types Of Assistance

Types of Assistance This table shows the types of assistance available from various Federal personnel:

PARTICIPANTS	TYPES OF ASSISTANCE
Contracting Officer	You may be the contracting officer of record for the acquisition. More than likely, however, you work for a contracting officer. In that case, your contracting officer is responsible for the contractual documents (e.g., the solicitation) and will be heavily involved in making the price-related decisions described in Chapters 9 and 10.
Requirements Managers End Users Commodity Specialists	<p>Requirements Managers initiate acquisitions by preparing purchase requests. Among other things, purchase requests specify the requirement and include the manager's best guess of the cost of contracting for that requirement (i.e., "Independent Government Cost Estimate"). After your receipt of the purchase request, requirements managers often can help:</p> <ul style="list-style-type: none"> • Review alternatives for improving the solicitation (Chapter 2), • Identify potential price-related factors for award (Chapter 4), • Account for significant discrepancies between different comparison bases (Chapter 8), • Provide advice and information for price-related decisions (Chapters 9 and 10). <p>The End User may or may not be the requirements manager. If the requirements manager is not the end user, try to consult the end users when building the solicitation (Chapters 2 and 4) and making price-related decisions (Chapters 9 and 10). In addition, the end user may be more knowledgeable about the product and a better source for a Government estimate than the requirements manager.</p> <p>Some agencies have dedicated Commodity Specialists who, among other things, heavily research the markets for their respective commodities. They are of special value in performing the functions described in Chapter 1.</p>
Inventory Managers	Inventory managers keep track of large stocks of products in Government warehouses and other such facilities. Among other things, inventory managers generate purchase orders for replacement supplies as users draw on the Government stocks. They tend to be especially concerned about the solicitation (Chapters 2 and 4), in terms of its potential impact on delivery, inventory levels, and inventory costs.

(Table continued on next page)

I.4.2 Types of Assistance (Cont.)

Types of Assistance (Cont.) Continuation of the table on types of assistance available to you.

PARTICIPANTS	TYPES OF ASSISTANCE
Technical Specialists	<p>These specialists generally write specifications or statements of work and technical evaluation factors and evaluate technical proposals. In many acquisitions, the requirements manager acts as the technical specialist. Larger acquisitions, however, may involve teams or panels of technical experts (who, depending on the specific deliverable, may be engineers, scientists, or other such professionals).</p> <p>From a pricing standpoint, technical specialists may have a good understanding of the costs necessary to build a deliverable and also of the types and sources of commercial deliverables that may be available to satisfy a requirement.</p>
Transportation, Property, and Logistics Managers	<p>These specialists can help you select and apply price-related factors (Chapters 4 and 5) that involve transportation costs, Government-furnished property, and ownership costs. All may be involved if you plan to solicit based on a full life-cycle cost model.</p>
Competition Advocates	<p>Competition advocates review acquisition plans and analyze specifications to identify and, where possible, remove "barriers" to full and open competition. They also review justifications for other than full and open competition. From a pricing standpoint, they can be valuable allies in maximizing price competition (as described in Chapter 2).</p>
Legal Specialists	<p>Lawyers may play a role in clearing contracts and reviewing justifications for such price-related decisions as cancellation of an IFB after opening. Look to them for advice on the solicitation (Chapters 2 and 4) and on making the price-related decisions in Chapters 9 and 10.</p>
Contract Administrators	<p>Many Federal agencies have dedicated contract administration offices. These offices often conduct preaward reviews of proposals for such purposes as responsibility determinations. Contract Administrators may have more complete information on an offeror that can help you:</p> <ul style="list-style-type: none"> • Account for significant discrepancies between different comparison bases (Chapter 8), and • Make price-related decisions (Chapters 9 and 10).
Cost/Price Analysts	<p>Some contracting activities have dedicated Cost/Price Analysts who can assist you with the tasks described in this book. However, such analysts are often only available for higher dollar, more complex procurements.</p>

CHAPTER 1

PREPARE FOR PRICE ANALYSIS

Purchase Widgets

You have just received a purchase request for 98 widgets. The price estimate assigned by the initiator is \$1,000 per unit for a total of \$98,000.

You have never purchased a widget before, and you are particularly interested in assuring that the purchase price is fair and reasonable. A price of \$98,000 seems like a lot of money for 98 widgets and you are concerned that the estimate might not be reasonable.

Knowing that planning is the key to every successful contract, you are about to begin the planning process to purchase the widgets. You wonder what you can do at this point to verify the initiator's estimate and to develop your own preliminary price estimate. What steps do you follow?

Chapter 1 outlines a four-step process to develop a preliminary estimate of the price and otherwise prepare for price analysis prior to soliciting offers. The process can be used for purchases made using small purchase procedures, sealed bidding, or negotiation. Of course, the level of preparation required for each acquisition will depend such factors as your knowledge of the deliverable and the dollars involved.

Learning Objectives

At the End of
This Chapter

At the end of this chapter, you will be able to:

Classroom Learning Objective 1/1

Determine whether the Independent Government Price Estimate (IGPE) is supported by factual evidence (how was the estimate made, where did it come from, and is it reasonable).

Classroom Learning Objective 1/2

Identify pricing-related data in acquisition histories.

Classroom Learning Objective 1/3

Identify sources of market data and price-related questions that can be answered by consulting these sources.

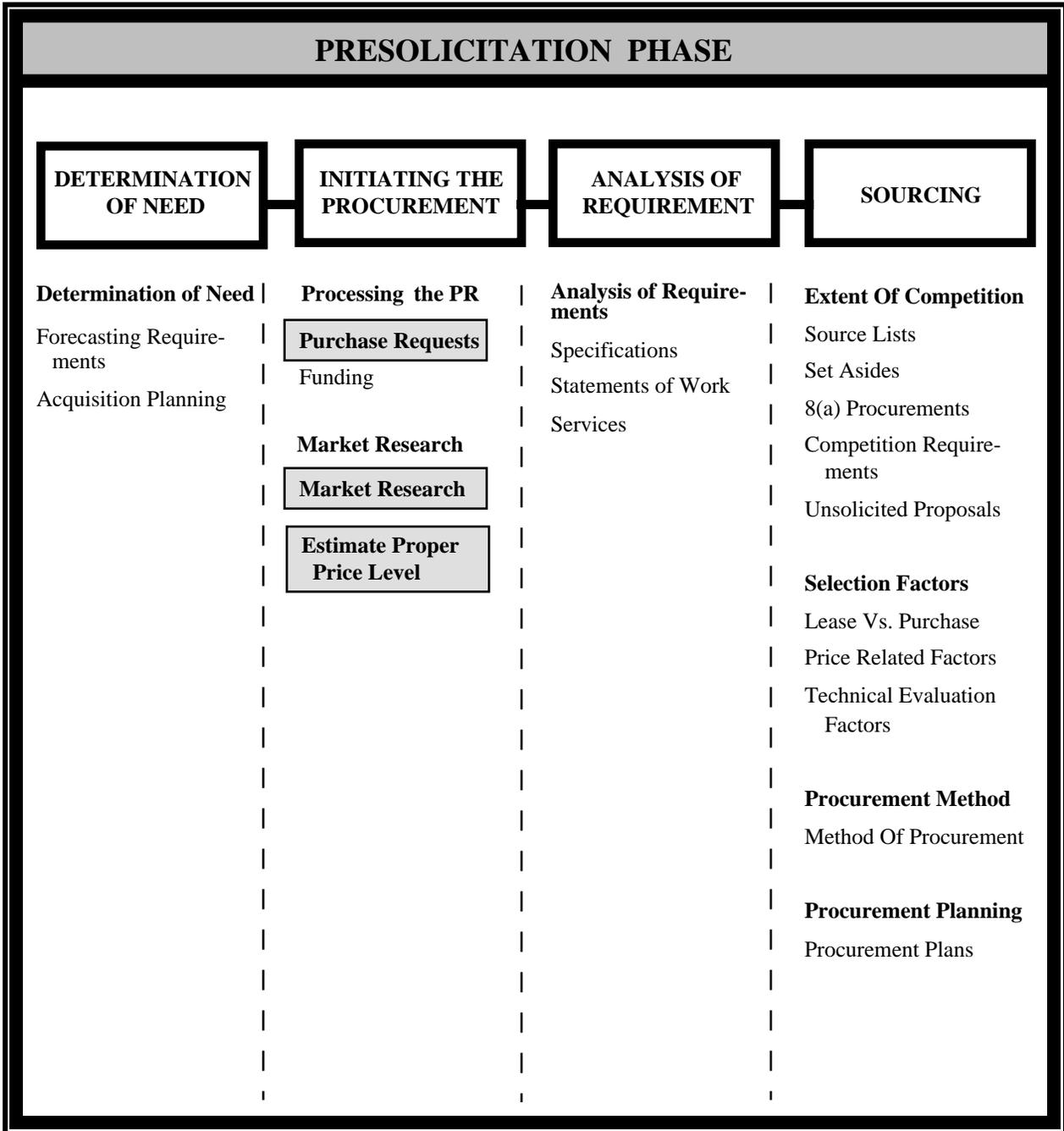
Classroom Learning Objective 1/4

Estimate the proper price level or value.

Procedural Steps

Procedural Steps

The following figure shows the sequence of events or steps that you should follow to prepare for price analysis prior to soliciting:



Preparing For Price Analysis As Part Of Acquisition Planning

Introduction

You will start every acquisition, no matter how large or small, with planning. The purpose of planning is to ensure that the Government meets its needs in the most effective, economical, and timely way possible.

Definition

Acquisition planning is the process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated. This process takes place through a comprehensive plan for fulfilling the Government need in a timely manner and at a reasonable cost.

Levels of Acquisition Planning Requirements

Planning may involve preparation of a detailed and well documented written plan, or, a less formal coordination. The overall planning effort should be scaled to the dollars available and the importance of the need. Planning requirements can be divided into two levels:

- Acquisition Planning—for high dollar/high visibility transactions
 - Contracting Planning—for all purchase transactions
-

Acquisition Planning

FAR Part 7

Acquisition planning should follow the detailed procedures outlined in FAR Part 7. It should begin as soon as the Government need is identified, preferably well in advance of the fiscal year in which contract award is necessary.

In developing the plan, the planner is required to form a team which includes all those who will be responsible for significant aspects of the acquisition, such as: contracting, financial, technical, and legal personnel. Overall planning responsibility is assigned to the designated program/project manager.

FAR Part 7

A comprehensive acquisition plan should address all the technical, business, management, and other significant considerations that will shape the acquisition. The specific content of these plans will vary, depending on the nature, circumstances, and stage of the acquisition. The planner must follow the applicable instructions in FAR Part 7, as well as applicable agency directives.

(Continued on next page)

Preparing For Price Analysis As Part Of Acquisition Planning (Continued)

Contracting Planning

Contracting planning is a part of acquisition planning that primarily considers the contracting process. It is required even if a detailed acquisition plan is not prepared. Planning begins when you receive a purchase request or comparable document that includes only the solicitation, award, and administration phases of the acquisition. You are responsible for the development of the contracting plan.

Levels of Acquisition Planning

The table below provides an overview of the two levels of acquisition planning, showing the part of the acquisition process each level encompasses, the situations in which each applies, relevant documentation, and the personnel responsible for the plan.

LEVELS OF ACQUISITION PLANNING		
LEVEL OF PLAN	COMPREHENSIVE ACQUISITION PLAN	CONTRACTING PLAN
ENCOMPASSES	Entire acquisition process—from establishing need through contract administration	Acquisition process subsequent to receipt of the purchase request
APPLIES WHEN	Purchases are high value/high visibility as defined by the contracting agency	All purchases. Part of Acquisition Planning when formal acquisition plan is prepared.
DOCUMENTATION	Documentation must follow the requirements of FAR Part 7 and related agency supplements	Purchases under \$25,000 rarely require plan documentation. Special formal documentation requirements for plans of various dollar amounts may be established by the contracting agency
RESPONSIBILITY	Program/Project Management personnel with assistance from contracting, financial, technical, and legal personnel	Contracting personnel with assistance from program management, financial, technical, and legal personnel

FAR Part 7

(Continued on next page)

Preparing For Price Analysis As Part Of Acquisition Planning (Continued)

Preliminary Price Estimates

A vital part of the acquisition process is the development of a preliminary estimate of the price that the Government should expect to pay. The FAR makes this an obligation of contracting officers, as follows:

FAR 15.803(b)

“Before issuing a solicitation, the contracting officer shall (when it is feasible to do so) develop an estimate of the proper price level or value of the supplies or services to be purchased. Estimates can range from simple budgetary estimates to complex estimates based on inspection of the product itself and review of such items as drawings, specifications, and prior data.”

Preliminary Price Estimates in Acquisition Planning

Preliminary price estimates drive many key decisions in the planning process, even that concerning the level of planning required. Other key decisions include whether to:

- Use small or large purchase procedures
- Require offerors to furnish certified cost or pricing data
- Use certain terms and conditions in the solicitation

Primary Goals in Acquisition Planning

Economical acquisition is one of the primary goals of the overall acquisition planning process. Preliminary price estimates become key inputs into the final pricing decision.

Overview

In This Chapter

This chapter covers four important steps in preparing to for price analysis prior to soliciting:

SECTION	DESCRIPTION	SEE PAGE
A	1.1 Step 1: Review the Purchase Request	1-9
	1.1.1 How Was the Estimate Made?	1-10
	1.1.2 What Assumptions Were Made?	1-11
	1.1.3 What Information and Tools Were Used?	1-12
	1.1.4 Where Was the Information Obtained?	1-14
	1.1.5 How Did Previous Estimates Compare with Prices Paid?	1-15
B	1.2 Step 2: Review Acquisition Histories	1-17
	1.2.1 Types of Acquisition Histories	1-18
	1.2.2 Price-Related Information in Acquisition Histories	1-19
C	1.3. Step 3: Research Market Data	1-21
	1.3.1 What to Research	1-22
	1.3.2 Published Market Data	1-24
	1.3.3 Other Sources of Market Data	1-38
D	1.4 Step 4: Estimate Proper Price Level	1-45
	1.4.1 Evaluating the Data	1-46

Purchase Widgets (Cont.)

The purchase request has an estimate of \$1,000 per widget for 98 widgets. That is \$98,000. How do you determine if that is a good estimate?

SECTION A

STEP 1:

1.1 REVIEW THE PURCHASE REQUEST

Overview

Definition

The purchase request is the document that formally transmits the requirement to the you. It is a key document in the acquisition process.

Independent Government Estimate

Every purchase request should include an **independent Government estimate**. It is this estimate that provides the you with the first information on the value placed on the identified supply or service by the requesting organization.

In this section

It is vital that you know how much to rely on the accuracy of the Government estimate. Major concerns include the following topics covered in this section:

TOPIC	SEE PAGE
1.1.1 How Was the Estimate Made?	1-10
1.1.2 What Assumptions Were Made?	1-11
1.1.3 What Information and Tools Were Used?	1-12
1.1.4 Where Was the Information Obtained?	1-14
1.1.5 How Did Previous Estimates Compare with Prices Paid?	1-15

1.1.1 How Was the Estimate Made?

Introduction

To judge the reliability of a Government estimate, you have to know how the estimate was made.

Types of Estimates

There are two major types of estimates:

- Estimates for automated purchase requests
 - Estimates for manual purchase requests
-

Estimates for Automated Purchase Requests

Estimates for automated purchase requests are prepared by a computer following an established algorithm.

You should be generally familiar with how the algorithm develops the estimate. Once you understand the procedure, you should remain alert to possible changes.

Estimates for Manual Purchase Requests

Estimates for manual purchase requests are typically prepared by the individual preparing the purchase request. Different organizations, and different individuals within the same organization, may have different methods of developing the Government estimate.

You must determine how each individual estimate was developed so that the other questions concerning reliability can be examined. This also provides insight into the time and effort spent in trying to develop an accurate estimate.

1.1.2 What Assumptions Were Made?

Introduction

Every estimate involves assumptions. Knowing and understanding those assumptions can give you an insight into the estimator's understanding of reliable estimate development.

Analysis of the Government Estimate

In many cases, user/technical/program personnel are not familiar with relevant cost factors and market forces that affect actual pricing. As a result, estimates may not be accurate. By means of analysis of the Government estimate and accompanying documentation, contracting personnel who are aware of the market and cost factors, can work with the estimator to adjust the estimate before the contracting process begins.

Example 1

Estimate: The estimator used the last price paid for an item to estimate the price for the same item ten years later.

Assumption: The assumptions here are that the last price paid was reasonable, and that the market situation has not changed in ten years.

Analysis: Over a few days or weeks, this assumption may be reasonable if quantity, delivery, and other factors have not changed. But what if the last purchase was made ten years ago? When these factors are known, contracting personnel can adjust for illogical estimator assumptions.

Example 2

In other cases, particularly where more specialized equipment or services are to be purchased, the technical assumptions of the estimator may be vital in developing a reliable estimate.

Estimate: The estimator estimated the construction price based on the assumption that certain materials would most likely be used in the building repair even though the true extent of damage could not be determined until repairs began.

Assumption: The assumption is that the material will be required even though there is no way of verifying the need first.

Analysis: The contracting personnel must rely on the technical experts. However, it does not stop contracting personnel from asking why the estimator made this assumption. **IN PRICING THERE ARE NO DUMB QUESTIONS!** If you do not know, ask!

1.1.3 What Information and Tools Were Used?

Introduction

It is important to determine what the estimator knew about the product or service requested.

"Professional Judgment" or "Detailed Understanding"

Estimates based on "professional judgment" are usually not as reliable as estimates based on detailed understanding of the product and the marketplace.

Collect Information

The **most successful estimators** "know their item." Before they make an estimate, they collect information on the product and the market for that product.

Most Reliable Estimates

The **most reliable estimates** are prepared by estimators who can answer "yes" to the following questions as these apply to a particular purchase request:

- Did the estimator perform a detailed analysis of the requirements of the purchase request?
 - Specifications?
 - Statement of Work?
 - Drawings?
 - Physical Inspection or Teardown?
 - Is the estimator familiar with the market for the item?
 - Last Price Paid?
 - Market Inflation?
 - Current Market Price?
 - Quantity Price Breaks?
 - Possible Substitutes?
-

Estimating Tools

Information alone is not enough. The estimator must be able to apply available information to estimate development and to adjust for changes in the marketplace, both technical and monetary. When possible, these adjustments should be made using accepted **quantitative techniques**.

(Continued on next page)

1.1.3 What Information and Tools Were Used? (Continued)

Example

Index numbers can be used to adjust prices for inflation.

Reasoned
Analysis

When quantitative techniques are not available, or cannot be used for some reason, the estimator should be able to provide a **reasoned analysis** of the estimating process. Estimates supported by words such as "professional judgment," but no factual data, are typically of little value in price analysis as illustrated in the example below.

Example

In an analysis of changes in technology, which of the following techniques would be more useful?

1. "Professional judgment"
 2. "Reasoned Analysis": A year ago, a product could not be produced with this level of sensitivity to high frequency sound. Today, similar units are available at a 30 percent higher cost than the less sensitive units they replaced. We are requesting new high sensitivity replacement units. This price estimate is therefore 30 percent higher than the last price paid for the original unit.
-

1.1.4 Where Was the Information Obtained?

Introduction An estimator can use several sources of pricing information on which to base an estimate.

Price Sources Often an estimator uses known **catalog prices** as the basis for preparing an estimate. When such sources are used, copies of the applicable portion of the catalog should be furnished to you for use in the evaluation of both the product and the quoted price.

Likewise, if an estimate is based on **prices from similar past purchases**, information on those purchases should be furnished to you for reference.

In both cases, you can use the same source documents in price analysis as those used by the estimator in developing the original estimate.

Estimate Based on Evaluation If no price history is available for the item or service (or similar items or services), the estimator must develop a price estimate by some other form of analysis. One option is to build an estimate based on an evaluation of the material and work involved. The more current the data, and the more closely it relates to the requirement, the more reliability you can place on the estimate.

Misleading Information Many data sources, such as stock lists, can present **misleading information**. Such sources have to be continually annotated and updated to reflect changes in prices resulting from dollar value, quantity, and technology changes. Estimators must be very careful when using older data.

Measure of Price Reasonableness While use of vendor catalogs and other known market data should be encouraged, estimators **MUST BE DISCOURAGED FROM CONTACTING VENDORS FOR SPECIFIC QUOTATIONS**. This is particularly true in sole source situations, where the Government estimate may be a primary basis for determining price reasonableness. If both the estimate and the proposal come from the offeror, there is no independent measure of price reasonableness.

1.1.5 How Did Previous Estimates Compare With Prices Paid?

Introduction

An examination of the Government estimate should include an examination of the estimator's track record.

Comparison with
Prices Paid

In evaluating estimates, ask: Have the estimator's estimates been close to contract prices determined fair and reasonable through analysis using other techniques?

If the answer is yes, greater reliance can be placed on current estimates developed using similar techniques.

If the answer is no, less reliance can be placed on these estimates.

Purchase Widgets (Cont.)

After reading Section A and reviewing the limited information available on the development of the widget purchase request estimate, you are concerned that the estimate may not be reasonable. You wonder if there is any information available in the purchasing office that you could use to verify the estimate.

SECTION B

STEP 2:

1.2 REVIEW ACQUISITION HISTORIES

Overview

Introduction

FAR 7.103(k)

The FAR requires agency heads to assure that “the contracting officer, prior to contracting, reviews: (1) The acquisition history of the supplies and services; and (2) a description of the supplies, including, when necessary for adequate description, a picture, drawing, diagram, or other graphic representation.”

One of the reasons for this requirement is to ensure that prior prices are considered in estimating the proper price of the current acquisition.

In this section

This section covers sources of acquisition histories and the kinds of information from those histories that may prove of value throughout the price analysis process.

TOPIC	SEE PAGE
1.2.1 Types of Acquisition Histories	1-18
1.2.2 Price-Related Information In Acquisition Histories	1-19

1.2.1 Types Of Acquisition Histories

Types of
Acquisition
Histories

Acquisition histories can take many forms:

- Purchase Files
- Computer Data Files
- Manual Item Records

Purchase Files. Usually, the best source of information is the original purchase file. Detailed information, and the rationale used to determine price reasonableness are available.

Computer Data Files. Computers provide immediate access to the data considered most important to purchase decision making. While computer data files may not be as complete as purchase files, they do provide key data in a form that can be used by the buyer in a timely fashion.

Manual Item Records. Manual item records provide data similar to that contained in computer data files.

1.2.2 Price-Related Information In Acquisition Histories

Acquisition
History Data for
Pricing

The table below presents typical data elements in acquisition histories and pricing related questions that can be answered from that data.

ACQUISITION HISTORY DATA FOR PRICING	
DATA ELEMENT	PRICING RELATED QUESTIONS
Specifications	Are there any significant differences between the prior contract and the current Purchase Request?
Sources of Supplies and Services	How many sources were solicited for the prior acquisition? What specific sources were solicited? How many sources offered bids or proposals? What specific sources offered bids or proposals?
Market Conditions	When was this deliverable last acquired? Is there any indication of prevailing market conditions at that time?
Quantities	What quantities were solicited? What quantities were acquired?
Delivery Terms	What was the delivery or performance period in days, weeks, months, or years? In what month(s) were the supplies to be delivered or the service to be performed? Did the vendor meet the delivery targets? What was the FOB point? Was premium transportation required for timely delivery?
Start-Up Costs	Did the contract price include one-time engineering, tooling, or other start-up costs? Should future contracts include similar or related costs? Were necessary start-up costs paid for in a manner separate from the price for the item or service?
Method and Terms Of The Procurement	What method of procurement was employed? What were the general terms of the contract? Are there any significant differences between terms of the last contract (e.g., packing requirements, type of contract, and the like) and those recommended in the Purchase Request for this acquisition?
Price	What was the contract price? How did the unsuccessful bids/proposals compare with that of the successful bidder/offeror?

Purchase Widgets (Cont.)

After reading Section B, you reviewed acquisition histories.. These histories reveal that unit prices for recent purchases of quantities of 25 to 40 units have been about \$1,000.

SECTION C

STEP 3:

1.3 RESEARCH MARKET DATA

Overview

Introduction

Acquisition histories, by definition, only provide data on prices last paid by the Government and may not be a good indicator of current prices for the same or comparable deliverables or factors that affect those prices. For many commercial and commercial-type products and services, you can readily find price-related data from published sources. And when acquisition histories and published sources are simply insufficient to the task of estimating the proper price, there are still other sources of market data to consult.

In this section

The following topics are addressed.

TOPIC	SEE PAGE
1.3.1 What To Research	1-22
1.3.2 Published Market Data	1-24
1.3.3 Other Sources of Market Data	1-38

1.3.1 What To Research

Factors to Consider in Researching the Market

The following are factors to consider in researching market data. For each factor, the table lists the types of questions that you should be able to answer after completing your research of the market.

FACTORS TO CONSIDER IN RESEARCHING THE MARKET	
FACTORS	RELATED QUESTIONS
Competitive Conditions	<ul style="list-style-type: none"> • How many sellers are in the market? • How many buyers?
Overall Level of Demand	<ul style="list-style-type: none"> • What is the relationship of the quantity we intend to buy vis-a-vis the quantities that others buy? • Will our volume justify a lower than market price due to the seller's increased economies of scale? • Will our volume be so large as to drive the sellers to or beyond full capacity, resulting in unanticipated inflation?
Trends in Supply and Demand	<ul style="list-style-type: none"> • Will demand be higher or lower at the time of award than now? • Will supply capacity keep pace with demand?
Pattern of Demand	<ul style="list-style-type: none"> • Is there a cyclical pattern to supply and demand? • Would awarding six months from now result in lower prices than an immediate award? • Or would it be better to stock up now at today's prices?
Trends in Prices	<ul style="list-style-type: none"> • What forces might drive up prices in the near future? <ul style="list-style-type: none"> - Strikes? - Labor shortages? - Subcontractor bottlenecks? - Energy shortages? - Other raw material shortages? • What forces might lead us to expect lower prices in the future? <ul style="list-style-type: none"> - Easing demand? - Easing shortages? - Victory in the Persian Gulf?
Pricing Strategies	<ul style="list-style-type: none"> • What are the pricing strategies of firms in the market? • What are the implications for expected prices?

(Table continued on next page)

1.3.1 What To Research (Continued)

Factors to Consider in Researching the Market (Cont.)

Continuation of the table presenting factors to consider when researching the market.

FACTORS TO CONSIDER IN RESEARCHING THE MARKET	
FACTORS	RELATED QUESTIONS
Sources	<ul style="list-style-type: none"> • Which firms in the market are the most likely to submit offers to a Government solicitation? • Which are the least likely and why? • Have there been historic differences between prices paid by the Government vis-a-vis other buyers? • Why?
Product Characteristics	<ul style="list-style-type: none"> • What features distinguish one deliverable from another? • Which deliverables match the most closely with the specification (as it currently reads in the PR). • What is the apparent tradeoff between features and price?
Delivery/Performance Lead-times	<ul style="list-style-type: none"> • What are the current distribution channels? • What are current transportation costs (if available and applicable)? • What are the commercial lead-times?
Ownership Costs	<ul style="list-style-type: none"> • What are the commercial warranty terms and conditions (if any)? • Historical repair costs? • Historical maintenance costs?
Terms and Conditions	<ul style="list-style-type: none"> • What type of specifications are used? • What type of contract is generally used in commercial transactions? • What types in prior Government acquisitions?
Problems	<ul style="list-style-type: none"> • What has been the historical default rate by firms in the market? • What performance problems have typically been encountered? • Have acquisitions been characterized by claims and cost overruns?

1.3.2 Published Market Data

Introduction

There are a number of published data sources that can be extremely valuable in identifying sources of pricing data and in developing preliminary price estimates.

Sources of
Published Data

Sources of published data include:

- Manufacturer and Dealer Catalogs
 - Product Brochures and Promotional Material
 - Trade Journals
 - Product Standard and Testing Laboratories
 - Source Identification Publications
 - Federal Supply Schedules (FSS)
 - Government Economic Data
 - Non-Government Economic Data
-

(Continued on next page)

1.3.2 Published Market Data (Continued)

Sources of Pricing Related Data

The table below summarizes the sources of pricing related data and typical data available for each source.

Sources of Pricing Related Data

Source	Product Spec	Product Picture	Pricing Info	Order Quantity Reqmnts Info	Delivery Data	Source Location	Warranty and Guarantee Info	Indep Evals	General Economic Data
<i>Catalogs</i>	Yes	Often	Yes	Yes	Yes	Yes	Rarely	No	No
<i>Product Brochures</i>	Yes	Often	Often	Often	Often	Yes	Yes	No	No
<i>Trade Journals</i>									
Advertisement	Yes	Often	Rarely	Rarely	Rarely	Often	Often	No	No
Product Evals	Yes	Often	Often	No	No	Often	Often	Yes	No
Articles	No	Rarely	Rarely	No	No	No	No	Yes	No
<i>Source ID Pubs</i>									
Yellow Pages	No	Rarely	No	No	No	Yes	No	No	No
Thomas Register	Yes	Yes	No	No	No	Yes	No	No	No
<i>Product Stand. & Testing Labs</i>									
Qualified Products Lists	Yes	No	No	No	No	No	No	Yes	No
Underwriters Laboratory	Yes	No	No	No	No	No	No	Yes	No
<i>Federal Supply Schedules</i>	Yes	Often	Yes	Yes	Yes	Yes	Often	No	No
<i>Govt Economic Data</i>	No	No	No	No	No	No	No	No	Yes
<i>Non-Govt Economic Data</i>	No	No	Some Do	No	No	No	No	No	Yes

1.3.2.1 Manufacturer and Dealer Catalogs

Description

Catalogs are familiar sources of data that can be found in both department stores and mail order houses. The **manufacturer and dealer catalogs** used in Government purchasing resemble these catalogs in the type of information they provide.

Data in
Manufacturer
and Dealer
Catalogs

The table below provides an overview of the typical data you can find in manufacturer and dealer catalogs.

DATA SOURCE	TYPICAL DATA
Catalogs	<ul style="list-style-type: none">• Product Descriptions• Pictures• Prices and Quantity Discounts• Minimum Order Requirements• Delivery Data• Points of Contact for Quotes and Orders

1.3.2.2 Product Brochures and Promotional Material

Introduction

In addition to catalogs, many firms also publish brochures and promotional material that contain details about major products or services.

Description

Brochures and promotional material provide much greater detail about specific products than would normally be included in a catalog with several thousand other products. While details on pricing and delivery are often included, this information may be excluded in order to provide greater latitude in negotiating the terms of sale.

Data in Product Brochures and Promotional Material

The table below gives an overview of typical data you can find in product brochures and promotional material.

DATA SOURCE	TYPICAL DATA
Product Brochures and Promotional Material	<ul style="list-style-type: none"> • Detailed Specifications • Pictures • Available Service Guarantees and Product Warranties • Points of Contact for Quotes and Orders • Pricing Information • Delivery Data

1.3.2.3 Trade Journals

Description

Trade Journals provide a variety of different types of information from different sources, including advertisements, product evaluations, and independent articles.

Trade Journal Data Sources

Advertisements typically consist of product descriptions, often with pictures and comparisons with competitor's products. Sources of further information are also identified.

Product evaluations provide independent information to members of the trade who may be considering the purchase of that product or a similar one. Evaluations usually deal with technical capabilities, but often include information on source locations, pricing, and warranties.

Articles about the trade may indirectly provide an independent analysis of product capabilities. Successes or failures in using particular products or services serve as evaluations of their quality.

Data in Trade Journals

The table below gives an overview of typical data you can find in trade journals.

DATA SOURCE	TYPICAL DATA
Advertisements for Products Used in the Trade	<ul style="list-style-type: none"> • General Product Descriptions • Pictures • Comparisons with Competitive Products • List Prices
Independent Product Evaluations	<ul style="list-style-type: none"> • Strengths and Weaknesses of Products • Warranty or Guarantee Provisions • Comparisons with Competitive Products • Pricing Information
Articles on Methods and Applications	<ul style="list-style-type: none"> • Application of Existing Products to Problem Solving • Strengths and Weaknesses of Products in Problem Solving

1.3.2.4 Product Standards and Testing Laboratories

Introduction Products are tested by both Government and commercial laboratories.

Qualified Products Lists The results of Government testing often means inclusion on **Qualified Products Lists**. Inclusion on an appropriate list may be considered essential for inclusion on solicitations for certain critical products.

Underwriters Laboratory The best known commercial testing laboratory is **Underwriters Laboratory (UL)**. Testing and approval by UL is essential for a wide variety of electrical products.

Data from Product Standards and Testing Laboratories The table below gives an overview of typical data you can obtain from product standards and testing laboratories.

DATA SOURCE	TYPICAL DATA
Qualified Products Lists <div style="border: 1px solid black; padding: 2px; display: inline-block;">FAR Subpart 9.2</div>	<ul style="list-style-type: none"> • Results of Product Tests to Government Standards
Underwriters Laboratory (UL)	<ul style="list-style-type: none"> • Results of Tests of Electrical Products to UL Commercial Standards

1.3.2.5 Source Identification Publications

Introduction

There are thousands of publications designed to assist you in locating possible sources of product information. The most widely accepted of these are the **Yellow Pages** and the **Thomas Register**.

Yellow Pages

Every city, large or small, has a telephone book with an associated **Yellow Pages**. Larger cities and metropolitan areas typically have one or more Commercial Yellow Pages and Business Yellow Pages. Many firms advertise in both, but the Business Yellow Pages specialize in the business and industrial products that are more relevant to Government purchasing. Both Yellow Pages identify firms by the products or services that they provide. Listings may even include pictures of major products.

The Thomas Register of American Manufacturers

The Thomas Register of American Manufacturers devotes 23 volumes to assisting commercial buyers identify potential product sources. The volumes are divided into four sections:

- Products and Services
- Company Profiles
- Catalog Files
- Inbound Traffic Guide

The *products and services section* lists companies by product or service.

The *company profile section* identifies the capabilities and contact information for listed firms.

The *catalog files* provide detailed product information, specifications, drawings, photos, availability, and performance data.

The *inbound traffic guide* provides an intermodal guide to transportation sources.

(Continued on next page)

1.3.2.5 Source Identification Publications (Continued)

Data in Source Identification Publications

The table below gives an overview of typical data you can find in the Yellow Pages and the Thomas Register.

DATA SOURCE	TYPICAL DATA
Yellow Pages	<ul style="list-style-type: none"> • Sources of Identified Products and Services by Geographic Location • Specific Products within a Product or Service Category.
Thomas Register	<ul style="list-style-type: none"> • Product Specifications • Selected Product Pictures • Source Location Information

1.3.2.6 Federal Supply Schedules

Description

Federal Supply Schedules (FSS) provide you with sources of numerous products and services. You do not need to seek further competition or determine that the prices are fair and reasonable, since inclusion on this schedule requires that such a price determination has already been made.

Optional and Mandatory FSS

Schedules that are mandatory for specific agencies provide mandatory sources of supply. Optional FSS also provide you with both sources and information that can be used to estimate the price of similar commercial products.

Data in FSS

The table below gives an overview of typical data available in FSS.

DATA SOURCE	TYPICAL DATA
Mandatory Schedules for Identified Agencies	<ul style="list-style-type: none"> • Product Descriptions • Pictures • Pricing and Discount Information
Optional Schedules	<ul style="list-style-type: none"> • Product Descriptions • Pictures • Pricing and Discount Information

1.3.2.7 Government Economic Data

Introduction

The Federal Government develops and publishes large amounts of economic data. Much of this information is used to make national economic decisions and is valuable to buyers attempting to develop preliminary price estimates. In developing such estimates, knowledge of the economy and market forces is vital.

Government Departments and Bureaus that Publish Data

Data are published by several Government departments and bureaus. The best known sources include:

- Department of Agriculture
- Department of Commerce
- Bureau of Labor Statistics (BLS)
- Federal Reserve System
- Congress

Several of these organizations may be willing to construct a special index for you if the need for the index justifies their cost for putting it together. For example, BLS provides the Navy with shipbuilding labor indices which they have tailored to assist in estimating the cost of constructing ships at commercial shipyards.

Producers Price Indexes (PPI)

Probably the best known and most used barometer of price trends is the **Producers Price Indexes** (PPI), a monthly publication of the Bureau of Labor Statistics. The PPI monitors relative price trends of products at the wholesale level. All these publications permit buyers to make price comparisons over time.

See Chapter 7, section 7.1.2, for information on how to use such indices and cautions about their use.

(Continued on next page)

1.3.2.7 Government Economic Data (Continued)

Government
Economic
Sources

The table below gives an overview of typical data available from various Government departments and bureaus.

DATA SOURCE	TYPICAL DATA
Department of Agriculture	<p><u>Agriculture Price Reports</u></p> <ul style="list-style-type: none"> • Monthly Agriculture Commodity Price Data <p><u>Agriculture Statistics</u></p> <ul style="list-style-type: none"> • Annual Agriculture Commodity Price Data
Department of Commerce	<p><u>Current Business Reports</u></p> <ul style="list-style-type: none"> • Monthly Data on Wholesale Trade and Inventories <p><u>Current Industrial Reports</u></p> <ul style="list-style-type: none"> • Periodic Reports on Production and Consumption in Identified Industries
Bureau of Labor Statistics	<p><u>Producer Prices and Price Indexes</u></p> <ul style="list-style-type: none"> • Monthly Reports on Price Movements in Primary Markets
Federal Reserve System	<p><u>Federal Reserve Bulletin</u></p> <ul style="list-style-type: none"> • Monthly Economic Indexes and Business Data
Congress	<p><u>Economic Indicators</u></p> <ul style="list-style-type: none"> • Monthly Information on prices, production, business activity, and purchasing power

1.3.2.8 Non-Government Economic Data

Introduction	<p>There are a number of non-Government sources of economic and market data, including:</p> <ul style="list-style-type: none">• Purchasing Organizations• Commodity or Industry Publications• Economic Analysis Services
Purchasing Organizations	<p>The most noted purchasing organization that publishes market data is the National Association of Purchasing Managers (NAPM). The NAPM provides members with monthly information on market price trends and product availability. Data are based on the projections of purchasing managers throughout the country.</p>
Commodity or Industry Publications	<p>Numerous commodity and industry publications provide specific market data. Periods of publication and the information presented vary.</p>
Economic Analysis Services	<p>Firms have also developed to provide forecasters with current analyses of general market conditions and price trends. Currently, the economic analysis service most widely accepted by Government purchasing organizations is DRI/McGraw Hill, U.S. Cost Information Service.</p>

(Continued on next page)

1.3.2.8 Non-Government Economic Data (Continued)

Data from Non-Government Economic Sources

The table below gives an overview of typical economic and market data that you can obtain from various non-Government sources.

DATA SOURCE	TYPICAL DATA
Purchasing Organizations	<ul style="list-style-type: none"> • Periodic, usually monthly, analyses of market conditions based on buyer perceptions and economic analysis.
Commodity or Industry Publications	<p><u>Chemical Marketing Reporter</u></p> <ul style="list-style-type: none"> • Weekly Information on Market Indexes, Current Prices, and Price Changes. <p><u>Random Lengths Lumber and Plywood Market Report Service</u></p> <ul style="list-style-type: none"> • Weekly Information on Supplies and Prices <p><u>The Black Diamond</u></p> <ul style="list-style-type: none"> • Every Other Month Information on Solid Fuel Prices <p><u>Iron Age</u></p> <ul style="list-style-type: none"> • Weekly Information on Steel, Ore, Primary Metals, and Scrap Prices

(Table continued on next page)

1.3.2.8 Non-Government Economic Data (Continued)

Data from Non-Government Economic Sources (Cont.)

Continuation of the table giving an overview of typical economic and market data available from various non-Government sources.

DATA SOURCE	TYPICAL DATA
Commodity or Industry Publications (Cont)	<p><u>Black's Office Space Guide</u></p> <ul style="list-style-type: none"> • Six Times Annually Information on Office Space Leasing Prices <p><u>Pulp and Paper Week</u></p> <ul style="list-style-type: none"> • Weekly Information on Paper Industry Prices, Economics, and Technology <p><u>Platt's Oilgram Price Report</u></p> <ul style="list-style-type: none"> • Daily Information on Current Oil Prices <p><u>Textile Pricing Outlook</u></p> <ul style="list-style-type: none"> • Information on Textile Petrochemical, Raw Material, Fiber, Yarn, and Fabric Prices
Economic Forecasting Services	<ul style="list-style-type: none"> • Data on Current Prices, Price Changes, Price Projections, and Economic Conditions Across the Economy.

1.3.3 Other Sources Of Market Data

Introduction

In the absence of good acquisition histories and published sources of market data, you may need to research other sources of information.

Other Sources

Sources include:

- Federal Government Buyers and Analysts
 - Buyers Outside the Federal Government
 - Suppliers
 - Additional Pricing Data Sources
-

(Continued on next page)

1.3.3.1 Federal Government Buyers and Analysts

Introduction

Federal Government personnel are available to provide help in developing and reviewing a preliminary price estimate.

Government Personnel

Examples of Government personnel who can provide information useful in pricing include:

- Buyers
- Contract Administrators
- Technical Experts
- Auditors

Data from Government Buyers and Analysts

The table below gives an overview of typical data you can obtain from Federal Government buyers and analysts.

DATA SOURCE	TYPICAL DATA
Buyers	<ul style="list-style-type: none"> • Information on Purchases of the Same or Similar Products • Identification of Potential Sources • Information on the Capabilities of Sources Already Identified
Contract Administrators	<ul style="list-style-type: none"> • Information on Purchases of the Same or Similar Products • Information on the Capabilities of Sources Already Identified • Performance Assessment Review Data
Technical Experts	<ul style="list-style-type: none"> • Identification of Potential Sources • Information on the Capabilities and Efficiency of Sources Already Identified • Identification of Price Drivers in the Government Requirements
Auditors	<ul style="list-style-type: none"> • Information from Prior Audits, Including Rate and Other Cost Trends • Information from Contractor Compensation Reviews

1.3.3.2 Buyers Outside the Federal Government

Introduction

Buyers from industry, state and local Governments can also provide useful information, particularly for common supplies and services. Information can be gathered in several ways.

Professional Meetings and Presentations

Discussions at professional meetings and presentations are a good way to gather general information on purchasing particular categories of supplies and services.

Telephone Surveys

Telephone surveys can also provide useful information on potential sources in the area. Potential sources may use other buyers as specific references on past performance. While confirming source capabilities, it is also possible for you to gather information on pricing of similar supplies and services.

1.3.3.3 Suppliers

Introduction

Suppliers are a good source of information of market information for planning purposes.

**FAR Parts
15.402(b) and (e)**

However, the FAR requires Contracting Officers to “furnish identical information concerning a proposed acquisition to all prospective contractors.” It therefore prohibits providing the advantage of advance knowledge concerning a future solicitation to any prospective contractor, other than through the mechanisms of:

- Presolicitation notices, as prescribed in FAR 15.404.
- Presolicitation conferences, as prescribed in FAR 15.404.
- Requests For Quotations and other such solicitations for information or planning purposes, as prescribed in FAR 15.405.
- Long-range acquisition estimates published in accord with FAR 5.404.

The table below gives an overview of typical data available from these various mechanisms:

DATA SOURCE	TYPICAL DATA
Presolicitation Notices	<ul style="list-style-type: none"> • Expressions of interest in the contemplated acquisition. • Information on the firm's management, engineering, and production capabilities. • Other preliminary information based on a general description of the supplies or services involved.
Solicitations For Information Or Planning Purposes	<ul style="list-style-type: none"> • Price quotations. • Quantity breaks for discounts. • Delivery terms. • Market conditions. • Comments on the proposed requirement.
Presolicitation Conferences	<ul style="list-style-type: none"> • Uncertainties that may drive up prices. • Non-commercial requirements that may drive up prices. • Other aspects of the requirement that may limit competition or affect their pricing.

1.3.3.4 Additional Pricing Data Sources

Introduction	Additional sources of pricing data include Trade and Professional Associations and State and Local Watchdog Agencies .
Trade and Professional Associations	Trade and professional associations can provide information about sources, source responsibility, commercial standards, and cost drivers.
Chamber of Commerce and Better Business Bureau	Professional organizations devoted to business development and the maintenance of responsible business practices, such as the Chamber of Commerce and Better Business Bureau , can provide substantial information on pricing, available competition, and the responsibility of identified sources.
State and Local Watchdog Agencies	State and local watchdog agencies can provide information on the capabilities and pricing of sources, particularly sources accused of price gouging or poor performance.

Purchase Widgets (Cont.)

Your analysis of the available sources of information has identified several estimates of price. How do you use these different estimates to develop your preliminary estimate of probable contract price?

SECTION D**STEP 4:****1.4 ESTIMATE PROPER PRICE LEVEL****Overview**

Introduction

Review of the purchase request, market data, acquisition histories, and related data should permit you to develop a probable range of likely offers and to identify the factors that are likely to influence offered prices.

In this Section

This section covers the following topic:

TOPIC	SEE PAGE
1.4.1 Evaluating the Data	1-46

1.4.1 Evaluating The Data

Evaluating the Data

The table below shows possible questions to be considered when developing a range of likely offers and identifying the factors that are likely to influence offered prices.

PRICE ESTIMATE DATA SOURCE	DATA ANALYSIS QUESTIONS	EVALUATION OF DATA RELIABILITY	PRICE ESTIMATE
Purchase Request Estimate	<ul style="list-style-type: none"> • How was the estimate made? • What assumptions were made? • What information and tools were used? • How did previous estimates compare with prices paid? 		
Acquisition History	<ul style="list-style-type: none"> • What prices have been paid in the past? • How were the historical prices determined fair and reasonable? • How comparable were the historical purchases? • Are there any evident price trends? 		

(Table continued on next page)

1.4.1 Evaluating The Data (Continued)

Evaluating the Data (Cont.)

Continuation of the table showing possible questions to be considered when developing a range of likely offers.

PRICE ESTIMATE DATA SOURCE	DATA ANALYSIS QUESTIONS	EVALUATION OF DATA RELIABILITY	PRICE ESTIMATE
Published Data	<ul style="list-style-type: none"> • What is the price of the product or comparable products? • How comparable is the product described in the published source? • Is there more than one price estimate that can be drawn from published sources? 		
Other Data Sources	<ul style="list-style-type: none"> • What other information is available? • How comparable is the product/price information from different sources? 		

Preliminary Estimate of Probable Price

After evaluation of all the data collected and consideration of the questions above, develop your preliminary estimate of the most probable acquisition price. Document the file with the rationale that you used in developing the estimate. Both the price and the rationale will be useful in later price analysis. They may also prove useful in later contract file reviews and future price analyses.

Purchase Widgets (Cont.)

What are the Implications of the Four-step Preliminary Price Estimate Development Process to Your Widget Purchase?

After studying Section A and reviewing the limited information available on the process the purchase request initiator followed in developing the purchase request estimate, you became more concerned that the estimate might not be reasonable.

Review of acquisition histories per Section B revealed that unit prices for recent purchases of quantities of 25 to 40 units had been about \$1,000.

Available catalogs indicate that prices may go as low as \$925 in quantities of 75 or more. Contacts with other data sources described in Section C show that your current solicitation list has identified all known widget sources and confirms your findings on available prices.

Combining all you have learned about widgets, and following the guidelines of Section D, you have set your preliminary estimate of probable price at \$925 a unit and a total estimated price of \$90,650. You feel confident with your estimate because it is based on a detailed analysis of available information.

APPENDIX

SOURCES OF PRICING AND PRICE-RELATED INFORMATION

This appendix contains an annotated list of pricing and price information sources, divided among three broad categories: (1) industrial, (2) governmental, and (3) other.

The listing is by no means complete. For example, there are over 50 trade journals that publish or maintain pricing information. Many of the most frequently used journals are available in both Government and public libraries. There are highly specialized governmental statistical publications besides those listed, and there are many associations beyond those identified here that may have information useful in special circumstances.

You will find many of the sources identified in this appendix useful for direct price comparison. These sources are weekly or daily price lists for a given commodity or industry. They are compiled through contact with wholesalers or reliance on commodity exchanges (spot prices) and price lists. Because the prices listed are often subject to various trade discounts, depending on quantity or type of customer, make sure that the list you are consulting pertains to the specific item in question, and that you adjust the price for any applicable trade discounts.

Several commodity or industry sources are useful in trend analysis. Among this group are publications of the Departments of Commerce and Labor that are available through the Government Printing Office. These periodicals are most valuable as indicators of past and future trends; the prices are *averages*, not direct quotations.

Sources such as the Thomas Register of American Manufacturers are useful in identifying sources of product information.

COMMODITY AND INDUSTRIAL SOURCES

1. CHEMICALS

a. Chemical Marketing Reporter

Weekly publication that offers three sources for price information: market indexes, current prices of chemicals and related materials, and the week's price changes. Also provides a market index number that reflects the price derived from 10 to 23 representative firms and the quantity each firm produced for its particular industry.

Address: Chemical Marketing Reporter
Subscription Department
100 Church Street
New York, NY 10007
(212) 732-9820

b. Chemical Industry Update (North American Report)

Address: Predicasts, Inc.
11001 Cedar Avenue
Cleveland, OH 44106
(800) 321-6388

2. LUMBER

a. Random Lengths Lumber and Plywood Market Report Service

Service is published weekly and supplies specific prices on more than 1,000 softwood lumber, structural panel, and other wood product items. Price guides are in easy-to-read formats with footnotes detailing the geographical areas to which the price applies and, in some cases, other pricing information.

Address: Random Lengths Publications, Inc.
P.O. Box 867
Eugene, OR 97440-0867
(503) 686-9925

3. METALS AND MINERALS

a. The Black Diamond

Magazine is published every other month rather than monthly because the spot prices on solid fuels vary only slightly within any calendar year. The prices for the coal industry are broken down by region and type of coal. Articles discuss the supply of iron ore, coal, and grain, developments in both the private and public sectors, and increased supply, layoffs, and costly EPA regulations. Articles of this type contain pricing information that can help in assessing the market.

Address: The Black Diamond
343 S. Dearborn St., Room 608
Chicago, IL 60604

b. Iron Age

Weekly publication provides price information on steel, ores, primary metals, and ferrous and nonferrous scrap. The editors of *Iron Age* gather their price information every Monday by calling representative dealers and scrap producers in the various geographic regions.

Address: Iron Age
Chilton Company
Radnor, PA 19089
(215) 964-4312

c. Metals Week

Newsletter provides three main sources of price information: daily prices and the weekly average, weekly prices, and monthly prices. A fourth indicator is the metals week price indexes for base metals, precious metals, and for nonferrous composite. This index graphically displays trends over the past two years.

Address: Metals Week
Attn: Marguerite Stanford
1221 Avenue of the Americas
New York, NY 10020
(212) 512-6126

4. OFFICE SPACE

a. Black's Office Space Guide

Guide is published six times a year. It contains leasing information for office space for over 1,200 sites in a given region. The guide features articles on a variety of topics, including negotiating a lease, what to look for from cleaning services, and additional tenant costs. *Black's Guide* is published for the following regions: New York, Philadelphia, Baltimore/Washington, Atlanta, and Houston.

Address: Black's Guide
P.O. Box 2090
Red Bank, NJ 07701
(201) 842-6060

5. PAPER PRODUCTS

a. Pulp and Paper Week

Weekly periodical covers prices, production statistics, economics, and technology concerning the paper industry. It lists prices for products in the four categories of paper and paperboard products. Second, the newspaper contains a separate listing of monthly producer price indexes for paper and board products. For trend analysis, these prices are compared with year-ago levels. Third, the prices of current wastepaper products are listed for 12 grades in the New York City, Chicago, Atlanta, and San Francisco-Los Angeles regions.

Pulp and Paper Week receives price data from private and Government sources. Sources vary monthly, but all are reputable and known to the industry. Some examples are: the American Paper Institute, National Association of Recycling Industries, Department of Commerce, and American Pulpwood Association.

Address: Pulp & Paper
500 Howard Street
San Francisco, CA 94105
(415) 379-1881

6. PETROLEUM AND GAS

a. Platt's Oilgram Price Report: An International Daily Oil/Gas Price and Marketing Newsletter

Newsletter first informs the reader of the day's developments in the oil market, generally by geography or by corporation. The prices for the various products in the oil market are then listed, the source specified, e.g., Venezuela, whether waterborne or pipeline, and whether spot price or official list price.

The prices printed in the Oilgram newsletter are actual sale prices, quotations, general offers, and posted prices. The editors receive the data directly from refineries, pipeline terminal operators, and tanker terminal operators for crude oil and products lawfully produced and transported. The prices represent current sales and shipments of each business day.

Address: Platt's Oilgram Price Report
1221 Avenue of the Americas
New York, NY 10020
(212) 512-3016

b. American Paint & Coatings Journal

Weekly publication contains several sources of pricing information. In addition to a regular feature entitled "Paint, raw material price indexes," the Journal includes a section on "The Markets" which analyzes supply and demand as well as expected price increases for various products. The Journal also reports on developments in the paint industry, such as computer networks and new products, and includes a column entitled "Financial Front" which provides a general statement about the financial status of major firms in this field.

Address: American Paint & Coatings Journal
Editorial and Subscription Offices
2911 Washington Ave.
St. Louis, MO 63103
(314) 534-0301

c. American Gas Association Monthly

Address: American Gas Association
1515 Wilson Boulevard
Arlington, VA 22209
(703) 841-8400

d. Weekly Statistical Bulletin

Address: American Petroleum Institute
Division of Statistics
1220 L Street, N.W.
Washington, DC 20005
(202) 682-8525

e. CRA Petroleum Economics Monthly

Address: Charles River Associates, Inc.
John Hancock Tower
200 Clarendon Street
Boston, MA 02116
(617) 266-0500

7. SANITATION AND BUILDING MAINTENANCE

a. Waste Age

Monthly publication covers developments in the solid waste management industry. The topical areas covered include municipal, maintenance, collection, and hauling.

Address: National Solid Waste Management Association
1730 Rhode Island Ave. N.W., Suite 512
Washington, DC 20036
(202) 659-4613

b. Clean Talk

Address: Writers Publisher Service
1512 Western Avenue
Seattle, WA 98101
(206) 789-2531

c. Building Services Contractor

Address: MacNair-Dorland Co.
101 W. 31st St.
New York, NY 10001
(212) 279-4455

d. Building Services Contractors Association

Address: 301 Maple Avenue, W., Suite 525
Vienna, VA 22180

e. Cleaning Management

Address: Harris Communications
Box 2068
Glendale, CA 91209
(213) 244-1176

f. National Waste News

Address: Newport Publications
4001 Westerly Place
Box W
Newport Beach, CA 92663

g. Professional Sanitation Management

Address: Environmental Management Association
1019 Highland Avenue
Largo, FL 33540
(813) 586-5710

h. Sanitary Maintenance

Address: Trade Press Publishing Co.
2100 W. Florist Avenue
Box 694
Milwaukee, WI 53201
(414) 228-7701

8. TEXTILE INDUSTRIES AND FABRICS

a. Textile Business Outlook. International textile forecasts.

b. Textile Pricing Outlook. Textile petrochemicals, raw materials, fibers, yarns, fabrics, end uses: price forecasts.

Address: Statistkon Corp.
(for both a 81 Peach Tree Drive
and b) Box 246
Norwich, NY 11732

GOVERNMENTAL SOURCES

1. AGRICULTURE, DEPARTMENT OF

a. Agricultural Price Reports. Monthly and annual. Commodity prices.

b. Agricultural Statistics. Annual. Commodity prices.

2. BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Address: 20th Street and Constitution Avenue, N.W.
Washington, DC 20551

- a. Federal Reserve Bulletin. Monthly. Includes economic indexes and data on business: commodity prices; construction, housing, and real estate; economic indexes: labor; manufactures; and retail and wholesale trade.
- b. Federal Reserve Banks. Monthly review published by each bank with special reference to its own Federal Reserve District. Economic indexes.
- c. Capacity Utilization: Manufacturing and Materials. Monthly.
- d. Industrial Production. Monthly.

3. BUREAU OF THE CENSUS, DEPARTMENT OF COMMERCE

In most cases, separate reports of the most recent censuses are available for each state, subject, industry, etc. Complete information on publications of all the censuses and current surveys conducted by the Bureau of the Census appears in the *Bureau of the Census Catalog*, published annually and available from the Superintendent of Documents. Copies may be purchased from Customer Services (Publications), Bureau of the Census, Washington, DC 20233.

- a. Current Business Reports. Includes a series of three reports listed below:
 - (1) *Advance Monthly Retail Sales*. Estimated monthly retail sales for the United States; estimated monthly retail sales by kind of business for the United States; percent change in estimated monthly retail sales by kind of business for the United States; estimated monthly retail sales of Group II Companies by kind of business for the United States; and estimated monthly retail sales by selected kinds of business for specified areas and cities.
 - (2) *Monthly Retail Trade*. Estimated dollar sales volume of all retail stores and those of organizations operating 11 or more retail stores. United States by kind-of-business, current month with comparisons for previous months. Estimated monthly sales of stores of organizations operating 1 to 10 retail stores. Census regions by kind-of-business for the same periods. Estimated weekly sales during current month of retail grocery stores operated by organizations with 11 or more retail stores, United States. Percentage changes (previous month) in sales, all kinds of business combined, for stores of organizations operating 1 to 10 retail stores, by selected standard metropolitan areas.

- (3) *Retail Sales, Annual Report.* Estimates of sales of all retail stores and those of organizations operating 11 or more retail stores, United States and Census regions, by kind-of-business. Year-end merchandise inventories, sales-inventory ratios, and accounts receivable balances held by all retail stores and those of organizations operating 11 or more retail stores, by kind-of-business, United States.
- b. Current Business Reports. Monthly wholesale trade, sales, and inventories. Contains wholesaler's sales and inventories, by kinds of business and geographic divisions.
- c. Current Industrial Reports. Presents statistics on total United States shipment, production or consumption of the following products, based on a survey of manufacturers.
- (1) *Aluminum Ingot and Mill Products (M-33-2).* (Monthly, Preliminary Summary and Summary Issues.)
 - (2) *Backlog of Orders for Aerospace Companies (MQ-37D)* (Quarterly and Summary Issues); *Aircraft Propellers (MA-37E)* (Summary Issue); *New Complete Aircraft and Aircraft Engines (M-37G)* (Monthly and Summary Issues).
 - (3) *Clay Construction Products (M-32D)* (Monthly and Summary Issues.)
 - (4) *Closures for Containers (M-34H)* (Monthly and Summary Issues.)
 - (5) *Construction Machinery.* (MQ-35D Quarterly.) (MA-35D Summary Issue.)
 - (6) *Copper Controlled Materials (ITA-9008).* (Quarterly and Summary Issues.)
 - (7) *Electric Lamps (MQ-36B).* (Quarterly and Summary Issues.) *Electric Lamps (M-36D).* (Monthly.)
 - (8) *Fats and Oils: Oilseed Crushings (M-20J), and Production, Consumption and Stocks (M-20K).* (Monthly and Summary Issues.)
 - (9) *Finished Fabrics Production, Inventories, and Unfilled Orders (M-22A).* (Monthly.)
 - (10) *Flat Glass (MQ-32A).* (Quarterly and Summary Issues.)
 - (11) *Flour Milling Products (M-20A).* (Monthly and Summary Issues.)
 - (12) *Fluorescent Lamp Ballasts (MQ-36C).* (Quarterly and Summary Issues.)
 - (13) *Footwear (M-31A).* (Monthly and Summary Issues.)

- (14) *Glass Containers (M-32G); (MA-32G)*. (Monthly and Summary Issues.)
- (15) *Industrial Gases (M-28C); (MA-28C)*. (Monthly and Summary Issues.)
- (16) *Inorganic Chemicals (M-28A); (MA-28A)*. (Monthly and Summary Issues.)
- (17) *Inorganic Fertilizer Materials and Related Products (M-28B)*. (Monthly and Summary Issues.)
- (18) *Iron and Steel Castings (M-33A)*. (Monthly and Summary Issues.)
- (19) *Inventories of Steel Mill Shapes (M-33-3)*. (Monthly and Summary Issues.)
- (20) *Manufacturers' Shipments, Inventories, and Orders and United States Department of Commerce News-Advance Report on Durable Goods Manufacturers' Shipments and Orders (M-3-1)*. (Monthly and Advance Summary Issues.)
- (21) *Metalworking Machinery (MQ-35W)*. (Quarterly and Summary Issues.)
- (22) *Nonferrous Castings (M-33E)*. (Monthly and Summary Issues.)
- (23) *Paint, Varnish, and Lacquer (M-28F)*. (Monthly and Summary Issues.)
- (24) *Plumbing Fixtures (MQ-34E)*. (Quarterly and Summary Issues.)
- (25) *Refractories (MQ-32C)*. (Quarterly and Summary Issues.)
- (26) *Steel Shipping Drums and Pails (MQ-34K)*. (Quarterly and Summary Issues.)
- (27) *Titanium Mill Products: Ingots and Castings (ITA-991)*. (Monthly and Summary Issues.)

d. Statistical Abstract of the United States. Annual. Guide to data sources.

4. BUREAU OF ECONOMIC ANALYSIS, DEPARTMENT OF COMMERCE

a. Business Conditions Digest. (Monthly.)

Prepared in the Statistical Indicators Division of the Bureau of Economic Analysis. The Digest presents almost 500 economic indicators in a form convenient for analysts with different approaches to the study of current business conditions and prospects (e.g., the national income model, the leading indicators, and anticipations and intentions), as well as for analysts who use combinations of these approaches.

b. Survey of Current Business. (Monthly.)

Publication provides general information on trends in industry, the business situation outlook, and other items pertinent to the business world. The periodical will provide an overview of the market in which you are operating. It furnishes economic indexes and data on business; construction, housing, and real estate; manufactures; national income and wealth; retail and wholesale trade; and transportation.

5. BUREAU OF LABOR STATISTICS, DEPARTMENT OF LABOR

a. Consumer Price Index Detailed Report. (Monthly.)

The Consumer Price Index (CPI) is published by BLS in a news release between the 20th and 25th of the month following the reference month. The release includes a narrative summary and an analysis of major price changes. The information is also published in the *Monthly Labor Review* and in greater detail in the *CPI Detailed Report*. The CPI is based on prices from a fixed mix of goods selected from the following categories: food, clothing, shelter and fuels, transportation, medical services, and other goods and services used in day-to-day living. It may have limited application because it is the converse of the PPI; that is, retail rather than wholesale prices are represented.

b. Current Wage Developments. (Monthly.)

Wage and benefit changes resulting from collective bargaining settlements and unilateral management decisions, statistical summaries, and special reports on wage trends.

c. Handbook of Labor Statistics. Annual.

d. Monthly Labor Review.

Articles on labor force, wages, prices, productivity, economic growth, and occupational injuries and illnesses. Regular features include a review of developments in industrial relations, book reviews, and current labor statistics.

e. Producer Prices and Price Indexes. (Monthly and annual supplement.)

The Producer Price Index (PPI), formerly the Wholesale Price Index, is compiled and issued monthly. The index is first available to the public through a news release, usually in the second week of the month following any specific month. Then, a report entitled *Producer Prices and Price Indexes* is issued to provide comprehensive coverage on all components of the PPI.

The PPI is a comprehensive report on price movements at the primary market level, arranged by stage of processing and commodity. Supplement contains changes in the relative importance of components of the indexes, revisions in coverage, and annual averages. The PPI includes all commodities sold in the primary markets of the United States through commercial transactions. Retail transactions are not included. Civilian Government purchases are included, but military products are excluded.

f. Area Wage Surveys. (70 surveys throughout the year.)

These bulletins report on earnings in 70 major metropolitan areas for occupations common to a wide variety of establishments. Coverage includes office clerical, professional and technical, maintenance, custodial, and material movement occupations. Information on employee benefits is provided for about one-third of the areas each year.

6. BUREAU OF MINES, DEPARTMENT OF THE INTERIOR

- a. Mineral Commodity Summaries. Annual.
- b. Mineral Industry Surveys. Publications available from Bureau of Mines, Publication Distribution Branch, 4800 Forbes Avenue, Pittsburgh, PA 152213. Surveys of molybdenum, copper, gold and silver, iron, zinc, fluor spar, and sodium compounds are examples.
- c. Minerals and Materials. Bimonthly. Publication available from the U.S. Department of Interior, Bureau of Mines, 810 7th Street, N.W., Washington, DC 20241.

7. COMMERCE, DEPARTMENT OF

a. Guide to the 1982 Economic Censuses and Related Statistics

The guide provides an overview of economic censuses taken in years ending in "2" and "7", i.e., every five years. The 1982 censuses cover retail and wholesale trade, service industries, transportation and economic activity in Puerto Rico and other outlying areas under the jurisdiction of the United States.

The censuses provide information to government business, industry, and academics, and for general public use. For example, the Federal Reserve Board uses the data from the Current Industrial Reports to produce its monthly index of industrial production. The Department of Labor uses census statistics in its measurement of productivity and as weights for the Producer Price Index.

8. COUNCIL OF ECONOMIC ADVISORS

- a. Economic Report of the President. Annual.

9. ENERGY INFORMATION ADMINISTRATION, DEPARTMENT OF ENERGY
- a. Coal Production. Annual.
 - b. Electric Power Monthly.

Presents monthly summaries of electric utility statistics on net operation, net energy for load, peak load and net capability, fuel consumption, fuel stocks, fuel deliveries, and prices.
 - c. Electric Power Quarterly.

Provides comprehensive information on the electric utility industry's cost, quantity and quality of fossil fuel receipts, net generations, fuel consumption, and fuel stocks.
 - d. Natural Gas Monthly. (Monthly.)

Provides monthly and annual State and national data on production, storage, imports, exports, and consumption of natural gas. Also contains selected data on major interstate pipeline companies and on filings with the Federal Energy Regulatory Commission.
 - e. Petroleum Marketing Monthly. (Monthly.)

Provides current information and statistical data about a variety of petroleum products, including motor gasoline, distillants residuals, jet fuel, kerosene, and propane.
 - f. Petroleum Supply Monthly. (Monthly.)

Consisting primarily of tables and statistics, this publication also provides articles to help the reader understand and interpret the petroleum statistics.
 - g. Quarterly Coal Report.

Written for a wide audience, including Congress, Federal and State agencies, the coal industry, and the general public, this quarterly report provides comprehensive information about coal production, exports, imports, receipts, consumption, and stocks in the United States.
 - h. Weekly Coal Production.

Provides data on United States production of bituminous, lignite, and anthracite coals.
10. SMALL BUSINESS ADMINISTRATION
- a. Annual Report.

11. CONGRESS

- a. Economic Indicators. (Monthly.)

Provides pertinent economic information on prices, wages, production, business activity, purchasing power, credit, money, and Federal finance.

OTHER SOURCES

1. AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA

- a. Aerospace Economic Indicators. Quarterly.
b. Average Hourly and Weekly Earnings in the Aerospace Industry. Monthly.
c. Average Weekly Hours and Overtime Hours in the Aerospace Industry. Monthly.
d. Employment in the Aerospace Industry. Monthly.

2. AMERICAN GAS ASSOCIATION

- a. Gas Facts. Annual.
b. Quarterly Report on Gas Industry Operations.

3. AMERICAN IRON AND STEEL INSTITUTE

- a. Annual Statistical Report.

4. AMERICAN METAL MARKET

- a. Metal Statistics. Annual.

5. COMMODITY RESEARCH BUREAU, INC.

- a. Commodity Yearbook. Annual.
b. Commodity Yearbook Statistical Abstract Service. Quarterly (3 editions annually).

6. THE CONFERENCE BOARD

- a. The Conference Board Statistical Bulletin. Monthly.

7. EDISON ELECTRIC INSTITUTE
 - a. Statistical Yearbook of the Electric Utility Industry. Annual.

8. ELECTRONIC INDUSTRIES ASSOCIATION
 - a. Electronic Market Data Book. Annual.
 - b. Electronic Market Trends. Monthly.

9. THE INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA
 - a. U.S. Wholesale Prices of Crude Oil and Principal Products. Monthly.

10. MORGAN GUARANTY TRUST COMPANY OF NEW YORK
 - a. The Morgan Guaranty Survey. Monthly. (Wholesale price index)

11. PENNWELL PUBLISHING CO.
 - a. The Oil and Gas Journal. Weekly.

12. REPORT ON BUSINESS

The National Association of Purchasing Management (NAPM), 2055 East Centennial Circle, P.O. Box 22160, Tempe, AZ 85285-2160, publishes a monthly report compiled from survey questionnaire of a committee of purchasing managers from various geographic regions. The *Report on Business* graphically depicts general increases and decreases in price based on the data received. Further, specific commodities in short supply or showing significant changes during the month are discussed. A third feature of the *Report* is the Commodity Reports, in which subcategories of products, such as paper and packaging containers, are discussed in terms of supply and demand and price changes.

13. THE WALL STREET JOURNAL

The Wall Street Journal's Commodities section contains daily price information on items in the following categories: grains and feeds, foods, fats and oils, fibers and textiles, metals, miscellaneous (hides, newspapers, and rubber), precious metals, and oil. The prices are quoted for the day, for the previous day, and for one year ago. Further detail concerning bid or asked price, dealer or wholesale, f.o.b. and the region from which the price was quoted is provided by notations.

14. DRI/MCGRAW HILL

Address: DRI/McGraw Hill
4120 Ashford-Dunwoody Road, Suite 420
Atlanta, GA 30319

U.S. COST INFORMATION SERVICE

This service analyzes the outlook for more than 350 prices and wages domestically. The forecasts include:

Producer price indices for energy, iron and steel, chemicals, construction materials, machinery and equipment, and electronic components.

Average hourly earnings for construction, mining, manufacturing, and non-manufacturing industries; employment cost indices for wages and salaries, benefits, and compensation over a range of occupations.

Consumer price indices for such goods and services as transportation, medical care, energy, food.

15. THOMAS REGISTER OF AMERICAN MANUFACTURERS

Address: Thomas Publishing Company
One Penn Plaza
New York, NY 10117-0138

CHAPTER 2

MAXIMIZE PRICE COMPETITION

Learning Objectives

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective 2/1

Review Statements of Work (SOWs) and related elements of the Schedule and recommend changes to obtain more effective price competition.

Classroom Learning Objective 2/2

Recommend contract terms and conditions to obtain more effective price competition.

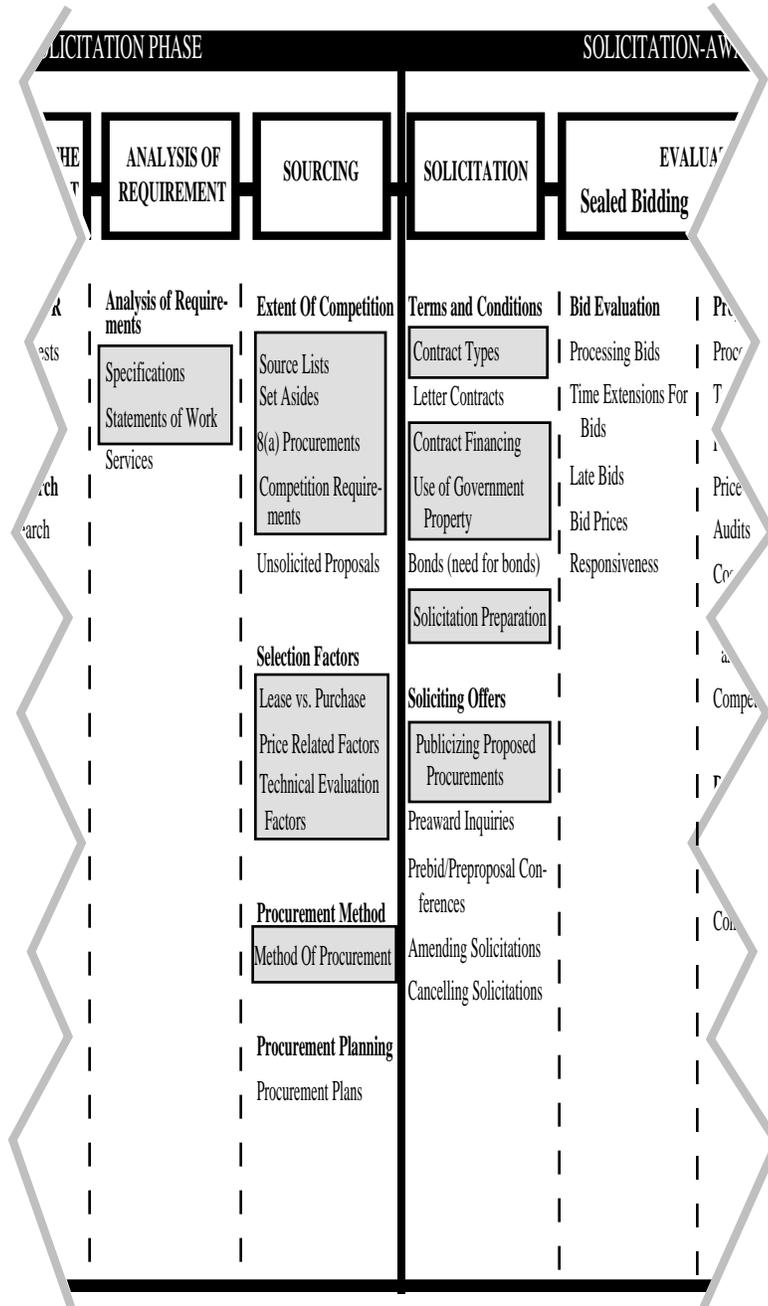
Classroom Learning Objective 2/3

Select method(s) of publicizing to obtain more effective price competition.

Procedural Steps

Procedural Steps

The following figure shows the sequence of events or steps that you should follow to maximize competition in sealed bidding and negotiations under Parts 14 and 15 of the FAR.



Chapter Overview

In This Chapter

In this chapter, we will examine various strategies for tailoring and publicizing solicitations to maximize price competition.

The Government policy regarding competition is stated in FAR 6.101.

FAR 6.101(a)

10 U.S.C. 2304 and 41 U.S.C. 253 require, with certain limited exceptions..., that contracting officers shall promote and provide for full and open competition in soliciting offers and awarding Government contracts.

You may be thinking, "Yes, that is true, but this is a course in price analysis. Why are we learning about maximizing competition?"

Competition is important to price analysis in two ways:

- Competition is widely acknowledged as the best way to encourage firms to offer a quality product at a reasonable price.
- "Adequate price competition" is the most common basis for exempting offerors from the requirement to submit certified cost or pricing data (see Chapter 3 for more information on this exemption).

What Is Meant By "Maximizing Price Competition"?

FAR 10.004(a)(1)

By maximizing price competition, we mean both:

1. Attracting competitive offers* from the best vendors (in terms of their track records for pricing, quality, timeliness, and integrity), and
2. Obtaining offers that are priced as low as reasonably possible, in part because the solicitation:
 - Reflects the Government's actual minimum need and
 - Otherwise minimizes the costs and risks to both parties of satisfying that need.

(Continued on next page)

* In this text, the term OFFERS will be used in situations where the material applies to both sealed bidding and negotiation. The term BIDS will be used when the information applies only to sealed bidding. The term PROPOSALS will be used when the information applies only to negotiations.

Chapter Overview (Continued)

Uniform Contract Format (UCF)

Contracting officers generally conform to the UCF in preparing solicitations (i.e., Invitations For Bids and Requests For Proposals). The following table lists UCF sections and, for each section, identifies potential impediments to obtaining the optimum level of price competition.

UNIFORM CONTRACT FORMAT FAR 14.201 AND 15.406			
SEC	TITLE	PURPOSE IN THE SOLICITATION	POTENTIAL IMPEDIMENTS TO PRICE COMPETITION
Part 1 — Schedule			
A	Solicitation/Contract Form	The first page of the solicitation/contract, e.g. SF 33.	
B	Supplies or Services and Prices	Lists the supplies or services being acquired, by line item and quantity.	<ul style="list-style-type: none"> • Failure to consolidate requirements.
C	Description/ Specifications/ Work Statement	Describes the supplies or services listed in Section B	<ul style="list-style-type: none"> • Use of vague or ambiguous terms. • Excessive (i.e., goldplated) or impractical requirements. • Use of design specifications when performance specifications are feasible. • Brand-name specifications. • Brand-name-or-equal specifications that admit few, if any, equals. • Use of Government-unique specifications for commercial or commercial-type deliverables. • Biased specifications (i.e., specifications geared to the unique features of a single product or of premium priced products).
D	Packaging and Marking	Specifies how the item must be packaged, packed, preserved, and/or marked as appropriate.	<ul style="list-style-type: none"> • Noncommercial requirements. • Excessive requirements. • Biased requirements.
E	Inspection and Acceptance	Specifies when, where, and how the deliverable will be inspected and accepted, as well as the contractor's obligations for quality assurance.	<ul style="list-style-type: none"> • Noncommercial requirements. • Excessive requirements. • Biased requirements.

(Table continued on next page)

Chapter Overview (Continued)

UNIFORM CONTRACT FORMAT (FAR 14.201 AND 15.406)			
SEC	TITLE	PURPOSE IN THE SOLICITATION	POTENTIAL IMPEDIMENTS TO PRICE COMPETITION
Part I — Schedule (Con't)			
F	Deliveries or Performance	Specifies when, where, and how the item(s) must be delivered, or when and where the services must be rendered.	<ul style="list-style-type: none"> • Noncommercial terms. • Delivery requirements not in tune with market cycles (e.g., requirements for "out-of-season" deliveries.) • Excessively tight deadlines.
G	Contract Administration Data	Accounting and other such information or instructions.	<ul style="list-style-type: none"> • Noncommercial requirements. • Excessive requirements.
H	Special Contract Requirements	Used for requirements that occur on a contract-by-contract basis.	<ul style="list-style-type: none"> • Noncommercial requirements. • Excessive requirements.
Part II — Contract Clauses			
I	Contract Clauses	Includes or references most clauses that will apply to work under the contract (e.g., bonds, type of contract, set asides, subcontracting, foreign sourcing, labor management relations, environmental protection, occupational safety, patents, rights in data, taxes, property, and warranties).	<ul style="list-style-type: none"> • Noncommercial terms and conditions. • Excessive requirements (e.g., an excessively long warranty period, relative to commercial warranties). • Use of the wrong type of contract, given risks inherent in the work. • Failure to use terms and conditions that could encourage competition.
Part III — List of Attachments			
J	List of Documents, Exhibits, or Other Attachments	Identifies any documents attached to the solicitation, including title, data, and page count.	
Part IV — Representations and Instructions			
K	Representations, Certifications, and Other Statements of the Offeror		
L	Instructions, Conditions, and Notices to Offerors	Instructs offerors on preparing and submitting offers, including any requirements for bid samples and descriptive literature.	<ul style="list-style-type: none"> • Noncommercial requirements • Excessive requirements.
M	Evaluation for Award	Prescribes how offers will be evaluated, e.g. price-related and technical factors.	<ul style="list-style-type: none"> • Price given too little weight relative to technical factors. • Biased evaluation factors (e.g., geared to unique features of a single product or of premium priced products).

Chapter Overview (Continued)

In this Chapter

In this chapter, you will learn the answers to three questions:

- How can solicitation Schedules (Part I of the UCF) be improved to yield more effective price competition?
- How can business terms and conditions (Parts II - IV of the UCF) be improved to yield more effective price competition?
- How can the methods of publicizing the buy be tailored to yield more effective price competition?

The chapter is divided into three corresponding sections:

SECTION	DESCRIPTION	SEE PAGE
A	2.1 Strategies For Improving The Schedule:	2-9
	2.1.1 Consolidate Requirements	2-10
	2.1.2 Promote Performance Specifications	2-15
	2.1.3 Commercialize the Purchase Description	2-17
	2.1.4 Target the Optimum Market Segment	2-32
	2.1.5 Match Delivery Schedule to the Market	2-35
	2.1.6 Obtain Industry Feedback on Proposed Specifications	2-39
	2.1.7 Obtain Relief from Restrictive Requirements	2-41

(Table continued on next page)

Chapter Overview (Continued)

In this Chapter
(Cont.)

The chapter is divided into three corresponding sections:

SECTION	DESCRIPTION	SEE PAGE
B	2.2 Strategies For Improving Business Terms And Conditions:	2-47
	2.2.1 Base the Contract Type on Risk Analysis	2-48
	2.2.2 Review Applicability of Socioeconomic Requirements	2-53
	2.2.3 Match Payment and Finance Terms to Market Conditions	2-55
	2.2.4 Furnish Government Property	2-57
	2.2.5 Minimize Cost of Warranty Requirements	2-59
	2.2.6 Optimize Price/Technical Tradeoffs	2-60
C	2.3 Strategies For Publicizing The Acquisition	2-63

Purchase Widgets (Cont.)

To obtain the best possible contract price, you want to assure effective competition for the widget contract. To do that you want to review the contracting strategies and other methods that you can adopt to maximize competition.

SECTION A

2.1 STRATEGIES FOR IMPROVING THE SCHEDULE

Overview

Introduction

Solicitations and contracts must include a description of the product or service the contractor is expected to deliver. This purchase description must describe the essential physical characteristics and functions required to meet the Government's minimum needs.

In this section

This section covers the following strategies for improving purchase descriptions and related terms (i.e., Part I of the UCF—Schedule) to obtain more effective price competition:

TOPIC	SEE PAGE
2.1.1 Consolidate Requirements	2-10
2.1.2 Promote Performance Specifications	2-15
2.1.3 Commercialize the Purchase Description	2-17
2.1.4 Target the Optimum Market Segment	2-32
2.1.5 Match Delivery Schedule to the Market	2-35
2.1.6 Obtain Industry Feedback on Proposed Specifications	2-39
2.1.7 Obtain Relief from Restrictive Requirements	2-41

2.1.1 Consolidate Requirements

Introduction

FAR 7.202

Federal agencies are required to procure supplies in quantities that will:

- Result in the total cost and unit cost most advantageous to the Government, where practical.
- Not exceed the reasonable quantity expected to be required by the agency.

In purchasing, the general assumption is that larger quantities will attract greater competition and result in lower prices. However, most inventory management systems do not consider the effect of larger quantities on price. Price is considered to be fixed regardless of the quantity purchased.

Consolidation Responsibilities

As you review the Government requirement and prepare Schedule B of the solicitation, you should consider several questions:

- Is the contracting office likely to receive more purchase requests for this item or service during the coming year?
 - Can we reasonably estimate total organization requirements for the coming year?
 - Can this requirement be combined with other known requirements to reduce the total cost to the Government?
-

Consolidation Strategies

If the answers to the above questions are YES, you should consider the use of one of the following strategies to minimize total cost to the Government:

- If the requirements are firm, consolidate purchase requests for the same end item.
 - Use an indefinite delivery contract when requirements are not firm.
-

(Continued on next page)

2.1.1 Consolidate Requirements (Continued)

Consolidate Purchase Requests

If you expect to receive purchase requests from a number of different activities for the same end item, encourage these activities to submit their purchase requests at roughly the same time. Then award a single contract for the aggregate quantity in the purchase requests.

FAR 17.5

Consider polling the requiring activities by phone if you suspect that a number of requiring activities will need the same end item. You might also consider "riding" the contract of another agency that needs the same end items.

Place Economic Order Quantities

There is only one drawback to consolidating requirements—you may end up with a warehouse full of supplies that are not immediately needed. The Government incurs a daily cost for storing unused supplies—a cost that may over time outweigh any price breaks from having purchased in bulk. Therefore, when deciding the quantity to acquire at any one time, you should minimize the total cost of both:

1. buying the supplies, and
2. storing the supplies.

This means balancing per unit prices against per unit storage costs, taking into account how many units are likely to be drawn from inventory each month. The "Economic Order Quantity" is the quantity that represents the best balance of acquisition and storage costs—this is the quantity that ideally you should award at any one time.

Identify the Economic Order Quantity

If inventory managers are available, work with them to determine the economic order quantity. You can also solicit information from offerors relevant to determining the economic order quantity.

Use Indefinite-Delivery Contracts

Most contracts are definite-delivery. The number of units, delivery dates, and prices are all firmly defined in the contract.

Indefinite-delivery contracts give the Government greater flexibility and buying power by combining requirements over an extended period of time with limited obligations regarding the exact time of delivery. They establish limits on the Government's obligation under the contract and provide flexibility in scheduling deliveries to minimize the costs to the Government for holding and managing inventory.

(Continued on next page)

2.1.1 Consolidate Requirements (Continued)

Types of Indefinite-Delivery Contracts

There are three principal types of indefinite-delivery contracts:

- Definite Quantity
 - Indefinite Quantity
 - Requirements
-

Definite-Quantity Contract

A definite-quantity contract provides for delivery of a definite quantity of specific supplies or services over an established time period. Deliveries are scheduled as the items are needed.

This type of contract is particularly useful when exact need dates are not known at the time the contract is written.

Example

Suppose an organization is building a road. A good estimate has been made of the required amount of concrete. Because of the weather and other factors, it is not known when each truckload of concrete will be required.

In this situation, a definite-quantity-indefinite-delivery contract can be used, instead of individual purchase orders. The result should be lower prices and more effective project schedule management.

Indefinite-Quantity Contract

An indefinite-quantity contract provides for an indefinite quantity of purchases within limits established in the contract. At the time that the contract is awarded, the Government is obligated only for a stated minimum order. Delivery orders may be placed as needed until the maximum is reached.

Example

Suppose an organization needs specialized engineering support. The exact amount of support is not known at the beginning of the year, but the requiring activity can estimate minimum and maximum limits. Here, an indefinite-quantity contract provides a useful contracting and pricing tool.

(Continued on next page)

2.1.1 Consolidate Requirements (Continued)

Requirements Contract

A requirements contract requires the contractor to fill all actual purchase needs for specific requirements at an agreed-to price. The Government is obligated to order only its actual requirements.

Example

Suppose the organization requires a standard supply item. The exact quantity is not known at the beginning of the year and it is not possible to clearly estimate a minimum and a maximum quantity for the year. However, it is possible to develop an estimate of quantity needs. A requirements contract will permit the organization to contract for needs that may develop based on the estimated quantity.

Comparison of Contract Types

The following table compares the obligations and pricing leverage of the three indefinite-delivery-contract types and a definite-quantity-definite-delivery contract:

CONTRACT TYPE	OBLIGATIONS	PRICING LEVERAGE RANKING
Definite Quantity Definite-Delivery	Specified Quantity Specified Delivery	First, if the entire quantity is known and contracted for at one time. Last, if individual small orders are required.
Definite Quantity- Indefinite-Delivery	Specified Quantity Unspecified Delivery Over Agreed-to Period	Second
Indefinite-Quantity Indefinite-Delivery	Minimum Quantity Maximum Quantity Unspecified Delivery Over Agreed-to Period	Third
Requirements	Buyer Agrees to Buy if Needed Seller Agrees to Sell at Agreed-to Price Unspecified Delivery Over an Agreed-to Period	Fourth

2.1.2 Promote Performance Specifications

Introduction

To maximize competition, it is the policy of the Government to define its minimum needs in the most generic way possible.

Specifications and Purchase Descriptions

The Government normally uses one of on three basic types of specifications to define its requirements:

- Design requirements.
- Performance - including specifications of the range of acceptance characteristics or the minimum acceptable standards.
- Function - so that a variety of diverse products or services may qualify.

In practice, the dividing lines may not be as clear as the textbook descriptions. A design specification may include performance requirements. Performance specifications usually include limited design requirements. The dividing line between a performance specification and functional specification can be unclear.

A particular specification is normally classified as the type of specification it most resembles, even though it also contains the elements of the other basic specification types.

(Continued on next page)

2.1.2 Promote Performance Specifications (Continued)

Design Specifications

A design specification spells out, in detail, the materials to be used, their sizes and shapes, and how the product is to be fabricated and built. The specification completely defines a product which can be built by a competent manufacturer in the industry.

Where the Government furnishes design specifications that control work under the contract, the parties to the contract presume that the specifications are adequate for the purposes intended and that, if adhered to, the desired result will be obtained. If the producer adheres to the specification, but the item does not serve the intended purpose, the failure is normally assumed to be the fault of the party that wrote the contract, that is, the Government.

Effect on Competition

If the design specification is in consonance with the designs and production methods common in the appropriate industry, it can produce extremely effective price competition and uniform products. If the specified designs or the processes are unique or out of date, the design specification can severely restrict competition.

Performance Specifications

Performance specifications express requirements in such terms as capacity, function, or operational requirements. In this type of specification, the details of the design, fabrication, and internal structure are left up to the option of the offeror, EXCEPT that certain features or parts may be specifically required.

Performance specifications are often used when NO suitable commercial product is available and there is NO standardized Government design. In such cases, the acquisition may be made using a performance specification and the design details left to the offeror. In this way, it is possible to obtain maximum competition and innovation on specialized products.

Research and development contracts are typically written using performance specifications. Increasingly, service and even equipment contracts are being written using performance specifications to promote innovation and increase competition.

(Continued on next page)

2.1.2 Promote Performance Specifications (Continued)

Example

An example of the use of a performance specification in acquisition of equipment is the purchase of a printer for computer operations. Specify a "laser printer" and you will receive a price of at least \$900 a unit. Specify "a printer that delivers 300 DPI (dots per inch) output on plain bond paper at a specified number of sheets per minute" and you may receive substantially lower prices for non-laser printers of comparable quality. For example, the Government may acquire "ink jet printers" that deliver 300 DPI output at \$500 per unit and also pay a lower price for supplies and maintenance.

Effect on Competition

Because performance specifications define results rather than method, they provide for greater innovation. In a fast changing industry, or in an industry with vastly different methods of contract performance, performance specifications will encourage greater competition.

HOWEVER, different performance concepts may complicate the use of price competition as a base for price analysis. See Chapter 8, Vendor Differences—Understanding the Requirements, and Chapter 10, Cost Analysis in Support of Price Analysis.

Functional Specifications

Functional specifications are a further extension of the concept of performance specifications. They provide the contractor with even greater latitude in defining how the Government requirement will be met.

Example

Within the DoD, a performance specification might define the performance of a new penetrating bomber using speed, range, payload, etc. A functional specification might provide for even greater innovation by defining a requirement for a new strategic weapon that will deliver a payload over a specified distance with a defined accuracy. Individual offerors might propose an aircraft, a missile, some combination of the two, or a totally different approach.

Effect on Competition

When innovation is desirable, functional specifications permit the greatest competition. HOWEVER, the potential complications of using price competition as a base to determine price reasonableness are the same as those identified above for performance specifications.

2.1.3 Commercialize the Purchase Description

Introduction

FAR 11.002

The FAR directs agencies to acquire commercial products and use commercial distribution systems whenever these products or systems adequately satisfy Government needs. The Government generally benefits from greater competition and lower prices when it buys commercial rather than against Government-unique specifications.

FAR 11.003

Acquisition of commercial products begins with a description of the Government's needs stated in functional terms. These must be in sufficient detail to permit market research and analysis to be used to help determine the availability of commercial products, distribution systems, and logistics support to fill those needs.

Section C of the UCF

Uniform Contract Format (UCF) Section C, Description/ Specifications/Work Statement, supplements the brief description in Section B about the supplies or services to be acquired.

Purchase Description. For supplies, the requirements are normally referred to as a purchase description. The purchase description defines the essential physical characteristics and functions required to meet the Government's minimum needs.

Statement of Work. For services, statements of work (SOWs) are detailed descriptions of the work to be performed. The definition of a SOW and appropriate contents will vary from agency to agency and organization to organization. In some agencies and organizations, the SOW is a synonym for UCF Part I. In others, the contents are carefully restricted to the contents of UCF Schedule C. As a minimum, the SOW should include:

- Identification of Applicable Standards
- Specifications
- Criteria for Determining if Requirements are Met

In some organizations, a SOW may also contain:

- Required Quantities
 - Performance Schedules
 - Required Quality
-

(Continued on next page)

2.1.3 Commercialize the Purchase Description (Continued)

Means for Specifying Requirements

The table below summarizes the various means you can use to specify Government requirements.

MEANS FOR SPECIFYING GOVERNMENT REQUIREMENTS (In Order From Most to Least Preferred) ¹	
EQUIPMENT AND SUPPLIES	SERVICES
Voluntary Standards	Statements of Work including Voluntary Standards ²
Commercial Purchase Description ² or Commercial Item Description (CID)	Statement of Work including a CID or Commercial Purchase Description
Federal Specifications and Standards ³	Statements of Work (SOWs) including Federal Specifications and Standards
Agency-Unique Purchase Descriptions which include specifications stated in terms of functions to be performed or performance required.	Statements of Work which outline to the greatest degree practicable the specific services to be performed.
Agency-Unique Purchase Descriptions which include specifications stated in terms of material, finish, schematics, tolerances, operating characteristics, component parts, or other design requirements.	N/A
Brand-Name-or-Equal Purchase Description ⁴	N/A
Brand-name Purchase Description ⁵	N/A

¹Based in part on FAR 10.002(d)(1) , 10.004, and 10.006 (as of FAC 90-10).

²See FAR 10.006(b).

³If GSA (or the agency, if other than GSA, responsible for the specification) has designated it as one for which no commercial exception may be allowed, a Federal specification is mandatory for use by all agencies acquiring supplies or services covered by the specification. In other words, the Federal specification would take precedence over a commercial purchase description.

⁴This is characterized in FAR 10.004(b)(3) as “generally, the minimum acceptable purchase description...”

⁵FAR 10.004(b)(2) generally forbids the use of this type of purchase description.

2.1.3 Commercialize the Purchase Description (Continued)

Definitions

The following are definitions of terms (in alphabetical order) used in the table entitled “Means for Specifying Government Requirements” on page 2-20.

Agency Unique Purchase Descriptions

Agency-Unique Purchase Descriptions are originated by a Federal agency, generally for a specific requirement that is the subject of a single solicitation. (In contrast, Federal Specifications are written at a Government-wide level for use in many different solicitations.)

Brand-Name Purchase Descriptions

Brand-name purchase descriptions identify a product by its brand name and model number, part number, or other appropriate nomenclature by which the product is offered for sale.

FAR 10.001

Brand-Name-Or Equal Purchase Descriptions

Brand-name-or-equal purchase descriptions contain references to one or more brand-name products, followed by the words "or equal." When feasible, all known acceptable brand-name products should be referenced. Prospective contractors are given the opportunity to offer products other than those specifically referenced. Such purchase descriptions should also identify salient physical, functional, or other characteristics essential to the Government.

FAR 10.004
(b)(3)

Commercial Purchase Descriptions

Commercial purchase descriptions identify essential physical characteristics and functions using the terms of general public trade, thus permitting offerors to furnish commercial products and the Government to benefit from the economies of commercial production and distribution systems.

FAR 11.000
FAR 11.003

Federal Specifications and Standards

Federal Specification or Standard means a specification or standard issued and controlled by the General Services Administration and listed in the “GSA Index of Federal Specifications, Standards, and Commercial Item Descriptions”.

FAR 10.001

(Continued on next page)

2.1.3 Commercialize the Purchase Description (Continued)

Standards

FAR 10.001

Standards are documents that establish engineering and technical limitations and applications of:

- Items
- Materials
- Processes
- Methods
- Designs
- Engineering Practices

Standards include any related criteria considered essential to achieve the highest practical degree of uniformity in materials or products, or interchangeability of parts used in those products. Standards may be used in:

- Specifications
- Statements of Work
- Other Types of Purchase Descriptions.

Specifications

FAR 10.001

Specifications are descriptions of the technical requirements for a material, product, or service that include the criteria for determining whether requirements are met. Specifications must state only the minimum needs of the Government and be designed to promote full and open competition, with due regard to the nature of the supplies or services to be acquired.

Voluntary Standards

Voluntary Standards are standards established by a private sector body and available for public use. Voluntary standards do not include private standards developed by individual firms.

Methods for Commercializing

There are four principal methods for "Commercializing" the specification:

- Discourage Brand-Name Purchase Descriptions
 - Critique Brand-Name-or-Equal Purchase Descriptions
 - Consider Alternatives to Federal Specifications and Standards
 - Promote Use of Commercial Products and Terms
-

2.1.3.1 Discourage Brand-Name Purchase Descriptions

Introduction

Government policy is that purchase descriptions must not specify a product, or a particular feature of a product that is peculiar to one producer, thereby ruling out products produced by other companies. This helps assure fair and equal competition.

Use of Brand-Name Descriptions

FAR
10.004(b)(2)

Brand-name descriptions cannot be used unless it is determined, in accordance with agency procedures, that the particular features of that product are essential to meeting Government requirements, and that similar products produced by other companies would not have these essential features.

"Dealer Competition"

FAR
15.804-3 (b) (iii)

In general, purchases with brand-name purchase descriptions cannot be considered competitive, even if several dealers offer bids or proposals. This "dealer competition" does not meet the requirements of FAR 15.804-3 (b) (iii) for independent competition for the contract award since all dealers must obtain the product from the same source. That source can ultimately control dealer prices by controlling the terms and prices agreed to by the various members of the product distribution system.

Special care must be taken to assure that "dealer competition" does not replace effective price competition.

Example

In a recent General Accounting Office (GAO) report (GAO/NSIAD-90-104), two of every three contract actions reviewed at a buying center were incorrectly coded as full and open competition even though potential sources were restricted to providing a particular product produced by only one manufacturer.

2.1.3.2 Critique Brand-Name-or-Equal Purchase Descriptions

When to Use the Brand-Name-Or-Equal Description

FAR
10.004(b)(3)

Generally, the minimum acceptable purchase description is a requirement defined by the use of a brand-name product description followed by the words "or equal." While this is the least preferred way of expressing a competitive need, it may be useful if:

- An adequate specification or more detailed description cannot feasibly be made available by means other than inspection and analysis in time for the acquisition under consideration.
- There is knowledge or a reasonable expectation that equivalent competitive products exist that are equal in all essential features to the brand-name product.

If equivalent products do not exist, the brand-name-or-equal purchase description becomes a brand-name description and must meet agency requirements for brand name use.

How to Use the Brand-Name-Or-Equal Description

When the brand-name-or-equal descriptions are used, all known acceptable brand names should be referenced. Prospective contractors must be given the opportunity to offer products other than those specifically referenced by brand name, as long as those products meet the needs of the Government in essentially the same manner as those referenced.

Brand-name-or-equal descriptions should set forth all salient physical, functional, or other characteristics of the brand-name product which are essential to the needs of the Government. For example, when interchangeability of parts is required, that requirement should be specified.

Content of Brand-Name-Or-Equal Purchase Descriptions

Brand-name-or-equal purchase descriptions should contain the following information to the extent available:

- Complete common generic identification of the product required.
- Model, make, or catalog for each brand-name product referenced, and the identity of the commercial catalog in which it appears.

(Continued on next page)

2.1.3.2 Critique Brand-Name-or-Equal Purchase Descriptions (Continued)

Content of Brand-Name-Or-Equal Purchase Descriptions (Cont.)

-
- Name of the manufacturer, producer, or distributor of each brand-name product referenced, and address if the firm is not well known.
 - When necessary to adequately describe the product required, an applicable commercial catalog description, or pertinent extracts therefrom, may be used if such description is identified in the solicitation as being that of the named manufacturer, producer, or distributor.
-

Completeness and Availability of Information

Assure that copies of any catalogs referenced, except part catalogs, are available on request for review by bidders at the purchasing office.

Take care to assure that all available information described above is provided to prospective sources to maximize competition.

Example

The General Accounting Office (GAO) recently reported (GAO/NSIAD-91-53) that solicitations giving only part numbers as item descriptions may be unnecessarily restricting competition. All solicitations questioned by the report required offerors to submit technical data, on both the brand-name item identified in the solicitation and any alternative product offered, so that the Government could determine whether the offered item met Government needs. However, the solicitations usually did not identify descriptive information available in the buying center on the items being solicited.

GAO found that:

- Complete data were available in 10 percent of the cases examined.
 - Complete data were available but categorized as proprietary in 17 percent of the cases examined.
 - Incomplete data were available for 46 percent of the cases.
 - No data were available for 27 percent of the cases.
-

(Continued on next page)

2.1.3.2 Critique Brand-Name-or-Equal Purchase Descriptions (Continued)

Completeness
and Availability
of Information

Example (Cont.)

Several prospective sources indicated that they could not identify the items required, because only part numbers were provided. Providing even incomplete data to prospective offerors should be beneficial to the Government by helping to increase competition.

Improve
Completeness
and Availability
of Information

What can be done to improve situations like this?

- In cases where complete data are available, brand-name-or-equal purchase descriptions should not be used.
 - In cases where only proprietary data are available, buyers and technical personnel should assure that the data are actually proprietary. If data do not meet the criteria for consideration and the appropriate Government legal counsel concurs, restrictions should be removed.
 - In cases where incomplete data are available, available data should be provided if it will assist in product identification.
 - In cases where no data are available, attempts should be made to identify relevant data available within the Federal Government and to assure that available data are routinely made available to the responsible purchasing organization.
-

2.1.3.3 Consider Alternatives to Federal Specifications and Standards

Introduction

Unless otherwise authorized by law or approved deviation, you must use Federal Specifications and Standards listed in the “General Services Administration Index of Federal Specifications, Standards, and Commercial Item Descriptions”. (Defense personnel must similarly use prescribed specifications and standards from the “Department of Defense Index of Specifications and Standards.”)

Exemptions

FAR 10.006(a)

Federal Specifications and Standards are mandatory unless the acquisition is for:

- Products required under an unusual and compelling urgency, and using mandatory specifications or standards would delay meeting Government needs.
 - Acquisitions under the small purchase limitation at FAR 13.000 (currently \$25,000).
 - Products acquired overseas.
 - Items, excluding military clothing, acquired for authorized resale.
 - Construction or new installations of equipment, where nationally recognized industry or technical source specifications and standards are available.
-

Shifting to Commercial Alternatives

There are four ways you can shift reliance from Federal Specifications and Standards to commercial alternatives:

- Commercial Exemption
 - Selective Application
 - Tailored Application
 - Deviations
-

Commercial Exemption

FAR 10.006(b)

Commercial Exemption. In lieu of using an indexed specification, consider stating the requirement in the form of a commercial purchase description, when appropriate under Part 11 and your agency's implementing regulations. However, anyone considering the use of a commercial purchase description should be careful. *The agency responsible for a particular specification or standard may have designated it as one for which this exemption cannot be used.*

(Continued on next page)

2.1.3.3 Consider Alternatives to Federal Specifications and Standards (Continued)

Selective
Application

FAR 10.004
(a)(3)(i)

Selective Application. Federal Specifications and Standards must be used selectively. Selective application requires that technical and contracting personnel review available specifications, standards, and related documents to assure that all necessary requirements are included and all unnecessary requirements are excluded from solicitations and contracts.

Tailored
Application

FAR
10.004(a)(3)(ii)

Once selected for use, Federal Specifications and Standards and related documents must be reviewed for opportunities to tailor requirements to better describe identified Government needs.

The specifications must not simply be included without consideration of the effect of the requirements on competition and contract performance. Individual sections, paragraphs, and sentences must be reviewed, and appropriately modified, so that only the minimum needs of the Government are required.

Deviations

FAR 10.007

When none of the exemptions described above apply and an existing specification does not meet your minimum needs, your agency may authorize deviations. Each agency authorizing deviations must establish procedures whereby a designated official having substantial contracting authority must be responsible for ensuring:

- Federal specifications are used and agency complies with requirements for exemptions and deviations.
 - Justification for exemptions and deviations are subject to competent review before authorization, and justifications can be fully substantiated if post audit is required.
 - Major or repeated deviations are not taken except as prescribed below.
 - Notification of deviation or recommendation for specification change is sent promptly in duplicate to the General Services Administration. (GSA).
-

(Continued on next page)

2.1.3.3 Consider Alternatives to Federal Specifications and Standards (Continued)

Deviations
(Cont.)

FAR 10.007

Deviations taken and reported by the agency in accordance with the provisions above may not be continued except under the following conditions:

- When an agency submits notification of major or repeated deviations that have been taken but makes no recommendation for change in the specification, GSA will notify the agency about authority to continue the waiver. In cases where continued deviations are not approved and the contract action has progressed to a point where it would be impractical to amend or cancel the action, the action may be completed, but the deviation shall not be continued by the agency in subsequent contracts.
 - When an agency recommends changing the specification consistent with the deviations it has taken and reported, the deviations may be continued until the recommended change is incorporated into the specification. When coordination with Federal agencies and industry does not result in acceptance of the change, the deviations shall not be continued by the agency in subsequent contracts.
 - Deviations from military specifications must be processed in accordance with applicable DoD regulations.
-

2.1.3.4 Promote Use of Commercial Products and Terms

Introduction

Commercial specifications and standards or commercial purchase descriptions should be used to define Government requirements when:

- Commercial products exist and mandatory Government specifications and standards do not exist.
- The product can be exempted from mandatory Government specifications because commercial products can adequately satisfy Government needs.

Commercialization should not be limited to the product description in Schedule C. The concept should be considered throughout the solicitation. Schedule D, Packaging and Marking, and Schedule E, Inspection and Acceptance, are two fertile areas for application of commercial concepts.

Convert to Commercial Products and Terms

When products meeting detailed Government specifications have satisfied user needs in the past, solicitations for commercial or commercial-type products to fill the same requirements should include provisions that allow the former producers to be considered for award under the detailed specifications. This applies as long as the specifications are current and all potential suppliers are competing on a similar basis.

Commercial Specifications and Standards

Many commercial voluntary specifications are listed in the *GSA Index of Federal Specifications, Standards and Commercial Item Descriptions*. These and other commercial voluntary specifications and standards, should be used, in modified form if necessary, to define minimum Government requirements whenever possible.

If mandatory Federal Specifications and Standards conflict with commercial specifications or standards, and commercial products meet the minimum needs of the Government, a commercial exemption should be considered. Mandatory Government specifications and standards should only take precedence over acceptable commercial counterparts when there is no commercial market or provision for exemption.

(Continued on next page)

2.1.3.4 Promote Use of Commercial Products and Terms (Continued)

Commercial Specifications and Standards (Cont.)

Cost Saving: The use of standards generally used in the commercial market place has great potential for reducing cost and improving quality.

- In the first year of the Department of Commerce's assumption of the responsibility for inspecting seafood procured by the DoD, the change from the use of restrictive specifications to U.S. Grade Standards resulted in a savings of \$5 million over previous DoD procurements.
- In the case of integrated circuits or microchips, there is significant opportunity to improve performance while reducing prices. The DoD alone buys almost \$2 billion of microchips annually at a price typically three to four times higher than similar commercial units. Moreover, the process of purchasing microchips made to Government specifications involves substantial lead time. As a result, military microchips typically lag a generation (three to five years) behind commercial microchips. Today, commercial standards provide high quality at a lower cost.

Commercial Purchase Descriptions

When commercial specifications and standards are not available, commercial purchase descriptions can be used.

An adequate **commercial purchase description** should specify the essential physical and functional characteristics of the materials or services required. As many of the following characteristics as appropriate should be used in preparing purchase descriptions:

- Common nomenclature to describe the product
- Materials used; i.e.:
 - Type
 - Grade
 - Alternatives
- Electrical data, if any
- Dimension, size, or capacity
- Principles of operation
- Restrictive environmental conditions
- Intended use, including;
 - Location within an assembly
 - Essential operating conditions
- Equipment with which an item is to be used
- Other pertinent information

(Continued on next page)

2.1.3.4 Promote Use of Commercial Products and Terms (Continued)

Commercial
Purchase
Descriptions
(Cont.)

Cost Savings: Examples of the benefits achieved by converting detailed Government specifications to commercial purchase descriptions include:

- A half-page purchase description was developed to replace a 20-page specification for military undershirts. The first purchase made using the new purchase description resulted in a \$797,000 savings over the price paid two months earlier for similar quantities of the shirts.
- Lengthy specifications for military boxer shorts and bed sheets were scrapped in favor of short purchase descriptions at a savings of \$65,000.
- Radiologists were able to obtain the quality of X-ray film they required by using a three-line purchase description instead of a detailed specification. This change was partially responsible for over \$2 million in savings.
- When a 22-page Federal specification was used to purchase socket wrench sets, there was one offeror, and the unit cost was \$145. A simpler commercial purchase description used to replace the specification brought seven bids and reduced the unit cost to \$85. Based on the purchase of approximately 3,000 units, savings were about \$180,000.

Commercial
Packaging and
Marking
Requirements

FAR 10.004 (e)

As required by agency regulations, you must require adequate packaging and marking of supplies to prevent deterioration and damage during shipping, handling, and storage. When acquiring commercial products, you should utilize commercial practices whenever possible.

It may not always be possible to use commercial packaging and marking. Products may require long periods of storage in a uniquely hostile environment. The military, for example, may require packaging that can withstand both subzero temperatures and desert heat. Military packaging may have to withstand the rigors of air drop and other unique handling.

However, even in the military, most products do not require more than standard commercial packaging. Identification of the appropriate packaging and marking requires close coordination between contracting, transportation management, and using activities.

2.1.3.4 Promote Use of Commercial Products and Terms (Continued)

Commercial
Inspection and
Acceptance
Requirements

FAR 46.201

You must include appropriate quality requirements in the solicitation and contract. The type and extent of quality requirements needed depends on the particular acquisition and may range from inspection at the time of acceptance to a comprehensive program for controlling quality.

Whenever feasible, solicitations and contracts should provide for alternative, but substantially equivalent, inspection methods to obtain wide competition and low cost. You may also authorize contractor-recommended alternatives when in the Government's interest and approved by the activity responsible for the technical requirements.

2.1.4 Target the Optimum Market Segment

Introduction

Analysis may reveal that the Government has restricted competition by identifying a product in a segmented market. There are two types of market segmentation that are of particular concern in Government purchasing:

- Single-Source Lock on Competition
- Requirement for a "Premium" Product

Look for a Single-Source Lock on Competition

Single-Source Lock on Competition. No matter how many sources are solicited and how many respond to a solicitation, competition cannot exist where a single firm has a decided advantage or a "lock" on competition. This advantage does not necessarily mean that prices bid/proposed are unreasonable, only that the firm has achieved a form of market segmentation and proposed prices are not controlled by effective price competition. The advantage may develop in several ways as shown in the examples below.

Examples

By virtue of patents in production technology, a manufacturer may have significant advantages over competitors.

A purchase description may specify that any item furnished must be compatible with existing equipment and systems. As a result, the producer of the original equipment or system may have an unfair technical advantage. (Compatibility requirements may also restrict technological advancement.)

(Continued on next page)

2.1.4 Target the Optimum Market Segment (Continued)

Identify a Lock on Competition

How do you determine if a firm has a lock on the competition?

If the answer to any of the following questions is yes, a situation exists that requires investigation.

- Do competitors or independent market analysts allege that a firm has an unfair competitive advantage?
 - Does one firm make a key component that must be used by all competitors?
 - Does the purchase description require compatibility with existing equipment or systems?
 - Does one firm constantly receive contract awards for the item?
 - Is the price of the low bidder/offeror far below the apparent competition?
-

Control Effects of a "Lock" on Competition

If it is determined that one firm does have a *lock on the competition*, price competition can no longer be used to determine price reasonableness. Some other means of price analysis, or a combination of cost and price analysis, must be used to make the decision.

Ways and means for *reinstating competition* in the acquisition process should also be considered. For example, Government-furnished tooling can compensate for tooling differences. Furnishing key components as Government-furnished material can eliminate any advantage held by the manufacturer of those components.

Recognize "Premium" Product Requirements

Requirement for a "Premium" Product. Another form of market segmentation is the *inclusion by a manufacturer of unique features* that set a product apart from its competition. Through this segmentation, the firm may prevent effective price competition and may be able to charge a premium price for the product. The prices offered by the firm may be fair and reasonable, but the pricing decision can no longer be made through competition.

(Continued on next page)

2.1.4 Target the Optimum Market Segment (Continued)

Look for
Premium Product
Features

Purchase descriptions must be carefully reviewed to identify any unnecessary features that may have the effect of market segmentation. If the answer to the following questions is YES, your purchase description requires special review and documentation:

- Are there any features that are required by the purchase description that are not available on generally similar products?
- Does the inclusion of the features reduce competition?
- Does the reduced competition have the potential for increasing contract price?

Requirement
Review and
Documentation

FAR 10.004
(b) (2)

Purchase descriptions must not be written to specify a product, or a particular feature of a product, that is peculiar to one manufacturer, thereby precluding competition. Such descriptions can only be used when it has been determined, in accordance with agency procedures, that the particular feature is essential to the Government's requirements, and that other companies' similar products lacking the particular feature would not meet the minimum requirement for the item.

2.1.5 Match Delivery Schedule to the Market

Introduction

Delivery schedules for materials can affect the ultimate price to the Government in three ways:

- Item Price
 - Cost of Excess Inventory
 - Cost of Operational Degradation Caused by Inventory Shortages
-

Assumptions

Careful review of most Government inventory management systems will show that they are, explicitly or implicitly, based on the following assumptions:

- Price is unaffected by delivery schedule
- Price is unaffected by the timing of the purchase

As a result, most inventory managers try to minimize holding costs while limiting the possibility of an inventory shortage. Requirement managers often delay purchases as long as possible and insist on short lead times. Unfortunately, these two assumptions regarding price do not stand up under close examination.

Price/Delivery Schedule Relationship

There is often a very strong relationship between price and delivery schedule. Shorter delivery schedules often mean:

- Using higher priced suppliers who can meet shorter delivery requirements
 - Paying a premium price for expedited transportation
 - Paying a premium price for production overtime
-

Price/Timing Relationship

Price is also affected by the timing of the purchase. Market prices for many items fluctuate significantly throughout the year because:

- Demand is seasonal and prices change with demand
- Production is seasonal and prices change with availability

Matching delivery schedules to market norms is one way to improve contract pricing and assure full and open competition.

(Continued on next page)

2.1.5 Match Delivery Schedule to the Market (Continued)

Managing
Delivery
Schedules

Consider the way one Government organization manages delivery schedules:

In 1990, GAO examined inventory and contracting practices at two Government buying centers (GAO/NSIAD-90-124).

GAO found that, in most cases, buyers made no effort to match delivery schedules to market norms. Instead, buyers awarded contracts based on quotes to deliver on the date specified by the organizations' automated inventory system. Since little was known about market delivery norms, there was no reason to question the specified delivery schedule. Buyers assumed that suppliers would deliver according to the contract schedule.

The data collected by GAO do not support this assumption. GAO examiners reviewed 109 purchases of 57 supply items. They found that:

- 1 purchase (0.9%) was delivered exactly on time
- 58 purchases (53.2%) were delivered an average of 51 days late
- 50 purchases (45.9%) were delivered an average of 61 days early

Market Delivery
Norms

Knowledge of market delivery norms could have substantially improved material management in these cases. Items delivered two months late may have caused inventory shortages or other operational delays.

From a pricing standpoint, it should be asked: *How many potential competitors who recognized that the required delivery schedule did not provide sufficient time for production and delivery, may have been unreasonably excluded from the competition?*

Firms that were aware that the Government would accept less-than-agreed-to delivery had an unfair advantage.

(Continued on the next page)

2.1.5 Match Delivery Schedule to the Market (Continued)

Market Delivery
Norms (Cont.)

All reasonable efforts should be made to give prospective contractors adequate time to produce the item being procured or to provide the required service. This can be accomplished by initiating the requirement as early as possible, by expediting presolicitation activities, or by slipping delivery dates to take into consideration potential supplier difficulties.

Establishing
Delivery
Schedules

When establishing delivery schedules for supplies or services, Contracting Personnel must consider a number of factors, including:

- Urgency of need
 - Production time
 - Market conditions
 - Transportation time
 - Industry practices
 - Capabilities of small business concerns
 - Administrative lead time for obtaining and evaluating offers—contractor delivery should not be curtailed because of Government delays in contract award.
 - Time required for the government to perform its contract obligations—such as delivering Government-furnished property
-

Construction
Projects

In construction, projects Contracting Personnel must consider a number of related factors:

- Nature and complexity of the project
 - Construction seasons involved
 - Availability of materials and equipment
 - Use of multiple completion dates
-

(Continued on next page)

2.1.5 Match Delivery Schedule to the Market (Continued)

Seasonal
Changes
Affecting Price

Deliveries can be timed to take advantage of seasonal and other market cycle changes in price. This can significantly reduce the prices of products that are affected by such changes. Some seasonal changes affecting prices are:

- Interior construction prices often decrease in colder months as the general level of construction declines.
- Prices of products associated with outdoor activities often decline in the winter.
- Prices of products associated with snow removal materials often decline in the summer.
- Fresh food prices decline as new crops become available.

Taking advantage of these price fluctuations requires market knowledge and planning.

Example 1

The price for 20 snowblowers will likely be cheaper in the summer, but this is difficult to explain to a user buried in 5 feet of snow. This situation shows why planning is so essential. The snowblowers must be purchased during the summer before they will be needed at the lower summer price.

Example 2

The price for interior construction is often lower during the winter months because new exterior construction has stopped. *Given a requirement for building modernization, should the contract be written in the middle of the winter to take advantage of this price break?*

No, the contract should be written during the summer or fall with the actual period of construction set for the winter. By so doing, the firm who receives the contract will be better able to efficiently schedule its resources to meet schedule requirements.

Increase
Competition and
Lower Prices

Buyers must know the product market where they purchase, and use this knowledge to increase competition and lower prices. To accomplish this, buyers must:

- Conduct a market analysis to identify seasonal price cycles.
 - Assure that requirements managers are aware of these cycles.
 - Remind users and funding organizations of possible savings.
 - Suggest deferring purchases or deliveries whenever they are scheduled for the higher-priced time of year.
-

2.1.6 Obtain Industry Feedback on Proposed Specifications

Introduction

While much information about the market can be obtained from the sources identified in Chapter 1, industry feedback can provide unique insights into:

1. Problems with Government unique specifications, and
2. Alternative ways of writing the specification that might result both in lower prices and a more useful deliverable.

Industry feedback can be obtained through:

- Presolicitation conferences
 - Solicitations for Information or Planning Purposes
-

Presolicitation Conferences

Presolicitation conferences may be held to explain complicated specifications and requirements to interested sources and obtain verbal feedback on the proposed requirement. Before holding such a conference, you must:

FAR 15.404

- Prepare a presolicitation notice and issue the notice to potential sources.
- Synopsise the notice in the Commerce Business Daily.

After the conference has concluded, you must add the names of all organizations attending the conference to the solicitation mailing list, unless they decline to participate in the acquisition.

Granted, presolicitation conferences add to the leadtime for issuing a solicitation. However, an ounce of prevention is worth a pound of cure. Such conferences can more than pay for themselves if participating suppliers give you the ammunition to shoot down potential impediments to maximum price competition (such as language in the draft specification that would bias the source selection). In addition, giving potential suppliers an opportunity to provide feedback on the draft Schedule may actually shrink the total leadtime for the acquisition by:

- Catching errors now that, if not discovered until later, would have necessitated issuing amendments and extending the closing date of the solicitation or even cancelling and reissuing the solicitation.
 - Reducing the likelihood of a successful protest.
-

(Continued on next page)

2.1.6 Obtain Industry Feedback on Proposed Specifications (Continued)

Solicitations for Information or Planning

FAR 15.405

When information necessary for planning purposes cannot be obtained from potential sources by more economical and less formal means, you may determine in writing that a solicitation for information or planning purposes is justified. Such solicitations must include the following clause from FAR 52.215-3:

FAR 52.215-3

SOLICITATION FOR INFORMATION OR PLANNING PURPOSES
(APRIL 1984)

- a. The Government does not intend to award a contract on the basis of this solicitation or to otherwise pay for the information solicited except as provided in subsection 31.205-18, Bid and Proposal (B&P) costs, of the Federal Acquisition Regulation.
- b. This solicitation is issued for the purpose of: (state purpose)

The Draft RFP

The most common form of solicitation for information is **the draft Request for Proposal (RFP)**. The draft RFP is becoming an integral part of efforts to streamline the acquisition process within the Department of Defense (DoD).

DoD has been criticized for long acquisition cycles and restrictive requirements that do not encourage the use of available state-of-the-art commercial systems and components. In response, the DoD has now included the draft RFP as a routine part of the acquisition cycle.

Use of the draft RFP provides potential offerors an opportunity to identify restrictive specifications, restrictive terms and conditions, and conflicting requirements before the RFP for the actual acquisition is issued.

As a result, RFPs are clearer and encourage more effective competition. Proposals are better, so there are fewer identified deficiencies and fewer requests for clarification and additional proposal data from offerors. Paper work is reduced, as well as overall time to award a contract.

2.1.7 Obtain Relief from Restrictive Requirements

Introduction Improving Government purchase descriptions to increase competition requires responsible and effective management at all levels. The effort is not limited to central purchasing and parts management activities, but must extend to all requiring activities and purchasing offices.

Analysis You and the buyers must work closely with product users, requirements managers, and suppliers. Together, you must analyze the:

- User's real needs
- Current product requirements
- Products available in the commercial market
- Real restrictions that prevent the use of commercial products

Improving Communications Effective communications are essential. Any effort to eliminate restrictive requirements must begin with top management in a department or agency. Objectives and benefits must be communicated.

A monitoring system—established through the inspectors general, internal audit, or other groups—should periodically determine whether managers at all levels are taking an active and positive approach to eliminating restrictive requirements and increasing the effectiveness of competition. This should be done to assure that the Government is paying a fair and reasonable price.

Key Purchasing Personnel Key purchasing personnel involved in the communications process are:

- Users
- Requirement Managers—key decision makers
- Suppliers—key information source in market research and analysis
- Purchasing Personnel—responsible for the effectiveness of the purchase decision

(Continued on next page)

2.1.7 Obtain Relief from Restrictive Requirements (Continued)

Effective Communication System

The table below provides an overview of the communication process necessary to eliminate restrictive requirements, and the key personnel involved.

EFFECTIVE COMMUNICATION		
PERSONNEL	COMMUNICATING WITH..	COMMUNICATING ABOUT..
Users	<ul style="list-style-type: none"> • Requirements Managers • Contracting Personnel 	<ul style="list-style-type: none"> • Adequacy of current specifications in communicating the user's minimum needs. • Current product capabilities. • Current product failures and deficiencies. • Suggestions for improvement and corrective action.
Requirements Managers	<ul style="list-style-type: none"> • Users • Contracting Personnel 	<ul style="list-style-type: none"> • Satisfaction of user needs with current products. • Satisfaction of user needs by less expensive commercial products. • Tailoring of mandatory specifications to assure identification of the minimum Government needs.
Suppliers	<ul style="list-style-type: none"> • Users • Requirements Managers 	<ul style="list-style-type: none"> • The industry: <ul style="list-style-type: none"> - Business practices in sales and distribution. - Production capacity. - Packaging and preservation practices. • Commercial products available to satisfy user needs. • Commercial product quality practices. • Commercial product support.
Contracting Personnel	<ul style="list-style-type: none"> • Users • Requirements Managers • Suppliers 	<ul style="list-style-type: none"> • Restrictive requirements. • Provision of commercial market information to users and requirements managers. • Analysis of competitive conditions in the market. • Communicating Government requirements to suppliers in a way that maximizes competition.

(Continued on next page)

2.1.7 Obtain Relief from Restrictive Requirements (Continued)

Catalysts for
Action

Contracting Personnel may also be required to serve as forceful catalysts for action. Ideally, working as a team, Contracting Personnel, requirement managers and users, with strong management support and encouragement, can increase competition, improve quality, and reduce prices.

However, there may be situations where there are uncertainties about the ability of modified Federal Specifications and Standards, commercial purchase descriptions, or commercial voluntary specifications or standards, to meet the minimum needs of the Government.

Example 1

Two potential suppliers assure you that their commercial products will "do the job just as well as the product specified by Federal Specifications, and save the Government at least 15 percent." The user and the requirements manager say that "the commercial products may work" but they are "not sure of the possible long-term effects on safety." They feel that, "we should stick with the product we know."

Example 2

You have a brand-name request for copy paper. Technical personnel certify that only the brand-name can meet Government needs. Suppliers of other copy papers indicate that their brands are "as good as the requested paper in all important respects and will save the Government at least 15 percent." Users and the requirements manager still maintain that "the brand-name paper is the only brand that does not jam under prevalent high-humidity conditions."

FAR 10.004

What should the contracting officer do?

In these examples, technical personnel have evaluated the commercial products and have rejected them, and it appears that the contracting officer's job is done. However, under FAR 10.004, the Government must only contract for:

"the Government's actual minimum needs and describe the supplies and/or services in a manner designed to promote full and open competition."

(Continued on next page)

2.1.7 Obtain Relief from Restrictive Requirements (Continued)

Requirement
Analysis (Cont.)

It may be that some suppliers are being unreasonably excluded from the competition. The Government may be paying for more than it needs at a price 15 percent higher than necessary. In addition, the rejected potential suppliers may protest exclusion from any future contract actions.

As a contracting officer, you should continue to ask questions to make sure that he/she gets the correct answer. There are no "dumb questions" in contracting, except those that are never asked!

Analysis Support

Whom should the contracting officer ask?

Ideally, you should work with the local users and the requirements manager to raise the question to higher authority within the agency. In the case of a Government specification item, you should raise the question to the authority responsible for the specification. If other personnel refuse to support the issues, you, as the contracting officer, should raise them with higher technical authority through contracting channels.

In either case, the ultimate answer might be to accept or reject the proposed alternatives. Regardless of the answer, you have fulfilled the responsibility of pursuing all actions necessary to ensure effective contracting. You have also formed the basis for a broad Government position on the answer. If potential suppliers do protest, no one will wonder why you did not ask the question earlier.

Purchase Widgets (Cont.)

"Tightly edit the schedule of the solicitation." That is what your supervisor always tells buyers who are preparing solicitations. Until now, you thought that she meant, "Make the delivery schedule as short as possible." Now you know that she is referring to Part I of the solicitation. By "tightly edit," she really meant that the buyer should assure that Part I of the solicitation is as clear and concise as possible. The clearer and more concise Part I, the greater the probability of effective competition.

SECTION B

2.2 STRATEGIES FOR IMPROVING BUSINESS TERMS AND CONDITIONS

Overview

In this section

This section covers the following strategies for selecting clauses and provisions for the solicitation to maximize price competition :

TOPIC	SEE PAGE
2.2.1 Base the Contract Type on Risk Analysis	2-48
2.2.2 Review Applicability of Socioeconomic Requirements	2-53
2.2.3 Match Payment and Finance Terms to Market Conditions	2-55
2.2.4 Furnish Government Property	2-57
2.2.5 Minimize Cost of Warranty Requirements	2-59
2.2.6 Optimize Price/Technical Tradeoffs	2-60

2.2.1 Base the Contract Type on Risk Analysis

Introduction

The selection of contract type can have a significant effect on both competition and contract price.

Two Contract Categories

Most contract types fit into one of two categories:

- Fixed-Price
- Cost-Reimbursement

The biggest difference between the two is the assignment of risk.

In **fixed-price contracts**, the contractor is required to deliver the product specified.

In **cost-reimbursement contracts**, the contract is required to deliver a "best effort" to provide the specified product. All allowable costs must be reimbursed, regardless of delivery, up to the level specified in the Schedule as the total estimated cost.

Risk, Contract Type, and Price

Analysis of the risk inherent in the contracting situation is the key element in the selection of an appropriate contract type. The relationship between risk, contract type, and price can be demonstrated by the following examples.

Examples

- Selection of a fixed-price contract when the risks are beyond the contractor's control, as in many development contracts, will increase price and reduce competition.
 - Selection of a cost-reimbursement contract when the risks are well within the contractor's control, as in most production contracts, will reduce the contractor's motivation to control costs.
-

(Continued on next page)

2.2.1 Base the Contract Type on Risk Analysis (Continued)

Major Types

The table below presents a comparison of the major contract types.

COMPARISON OF MAJOR TYPES OF CONTRACTS			
	<i>FIRM FIXED-PRICE (FFP)</i>	<i>INDEFINITE DELIVERY (ID)</i>	<i>FIXED PRICE ECON. PRICE ADJUSTMENT (FPEPA)</i>
Principal Risk to Be Mitigated	Costs of performance can be estimated with a high degree of confidence. Thus, the contractor assumes the risk.	At time of award, delivery requirements are not certain	Market prices for required labor and/or materials are likely to be highly unstable over the life of contract.
Use When:	<ul style="list-style-type: none"> The requirement is well-defined. Contractors are experienced in meeting it. Market conditions are stable. Financial risks are otherwise insignificant. 	<u>Definite Quantity:</u> <ul style="list-style-type: none"> The required quantity is known and funded at the time of award. <u>Indefinite Quantity:</u> <ul style="list-style-type: none"> The minimum quantity required is known and funded at award. <u>Requirements:</u> <ul style="list-style-type: none"> No commitment on quantity is possible at award. 	<ul style="list-style-type: none"> The market prices at risk are severable and significant. The risk stems from industry wide contingencies beyond the contractor's control. The dollars at risk outweigh the administrative burdens of an FPEPA.
Elements	Firm fixed price for each line item or one or more groupings of line items.	<ul style="list-style-type: none"> "Per unit" price. Performance period. Ordering activities and delivery points. Maximum or minimum limit (if any) on each order. Extent of each party's commitment on quantity. 	A fixed price, ceiling on upward adjustment, and a formula for adjusting the price up or down based on: <ul style="list-style-type: none"> Established prices. Actual costs of the labor or materials. Labor or material indices.
Contractor Is Obligated To:	Provide an acceptable deliverable at the time, place, and price specified in the contract.	Provide acceptable deliverables at the time and place specified in each order at the per unit price, within any ordering limits established by the contract.	Provide an acceptable deliverable at the time and place specified in the contract at the adjusted price.
Contractor Incentive (other than maximizing Goodwill) ¹	Generally realizes an additional dollar of profit for every dollar that costs are reduced.	Generally realizes an additional dollar of profit for every dollar per unit that costs are reduced.	Generally realizes an additional dollar of profit for every dollar that costs are reduced.
A Typical Application	Commercial supplies and services.	Long-term contracts for commercial supplies and support services.	Long-term contracts for commercial supplies during a period of high inflation.
Principal Limitations In FAR Parts 16, 32, 35, and 52	Generally not appropriate for R&D. Firm fixed-price level of effort contract may be used for R&D if agreement can be reached on effort required at < \$100,000.	Per unit price may only be FFP, FPEPA, FPPRD, or catalog/market based. Under a Req. contract, must procure only from that contractor for the covered deliverables.	Must be justified.
Variants	Firm Fixed-Price Level of Effort	Definite quantity, indefinite quantity requirements.	

2.2.1 Base the Contract Type on Risk Analysis (Continued)

Major Types of Contracts (Cont.)

Continuation of the table presenting a comparison of the major contract types.

COMPARISON OF MAJOR TYPES OF CONTRACTS			
	<i>FIXED PRICE AWARD FEE (FPAF)</i>	<i>FP PROSPECTIVE REDETERMINABLE (FPPRD)</i>	<i>FIXED-PRICE INCENTIVE (FPI)</i>
Principal Risk to Be Mitigated	Acceptance criteria are inherently judgmental, with a corresponding risk that the end user will not be fully satisfied.	Costs of performance can be estimated with confidence only for the first year of performance.	Labor or material requirements for work are moderately uncertain. Hence, the Government assumes part of the risk.
Use When:	Judgmental standards can be fairly applied. ² The potential fee is large enough to both: <ul style="list-style-type: none"> • Provide a meaningful incentive. • Justify the administrative burdens of an FPAF. 	The Government needs a firm commitment from the contractor to deliver the supplies or services during subsequent years. The dollars at risk outweigh the administrative burdens of an FPPRD.	Ceiling price can be established that covers the most probable risks inherent in the nature of the work. The proposed profit sharing formula would motivate the contractor to control costs and meet other objectives.
Elements	<ul style="list-style-type: none"> • A firm fixed-price • Fee pool • Standards for evaluating performance. • Criteria for determining a "fee" based on performance against the standards.² 	<ul style="list-style-type: none"> • Fixed price for the first period. • Proposed subsequent periods (at least 12 months apart). • Timetable for pricing the next period(s). 	<ul style="list-style-type: none"> • Ceiling price • Target cost • Target profit • Delivery, quality, and/or other performance targets (optional) • Ratio for adjusting profit based on actual costs and/or performance.
Contractor Is Obligated To:	Perform at the time, place, and the price fixed in the contract.	Provide acceptable deliverables at the time and place specified in the contract at the price established for each period.	Provide an acceptable deliverable at the time and place specified in the contract, at or below the ceiling price..
Contractor Incentive (<i>other than maximizing Good-will</i>) ¹	Generally realizes an additional dollar of profit for every dollar that costs are reduced; earns an additional fee for satisfying the performance standards.	For the period of performance, realizes an additional dollar of profit for every dollar that costs are reduced.	Realizes a higher profit by completing the work below the ceiling price and/or by meeting objective performance targets.
A Typical Application	Installation support services.	Long-term production of spare parts for a major system.	Production of a major system based on a prototype.
Principal Limitations In FAR Parts 16, 32, 35, and 52	Must be negotiated.	Must be negotiated. Contractor must have an adequate accounting system that supports the pricing periods. Prompt redeterminations.	Must be justified. Must be negotiated. Contractor must have an adequate accounting system. Targets must be supported by the cost data.
Variants		Retroactive Redetermination.	Firm or Successive Targets.

2.2.1 Base the Contract Type on Risk Analysis (Continued)

Major Types of Contracts (Cont.)

Continuation of the table presenting a comparison of the major contract types.

COMPARISON OF MAJOR TYPES OF CONTRACTS			
	<i>COST-PLUS-FIXED-FEE (CPFF)</i>	<i>COST-PLUS-INCENTIVE-FEE (CPIF)</i>	<i>COST-PLUS-AWARD-FEE (CPAF)</i>
Principal Risk to Be Mitigated	Labor hours, labor mix, and/or material requirements (among other things) necessary to perform are highly uncertain and speculative. Hence, the Government assumes the risks inherent in the contract, benefitting if the actual cost is lower than the expected cost; losing if the work cannot be completed within the expected cost of performance. Some cost type contracts include procedures for raising or lowering the fee as an incentive for the contractor to perform at lower cost and/or attain performance goals.		
Use When:	<ul style="list-style-type: none"> Formulas relating fee to performance (e.g. to actual costs) would be unworkable or of marginal utility. 	Objective relationship can be established between the fee and such performance measures as actual costs, delivery dates, performance benchmarks, and the like.	Objective incentive targets are not feasible for critical aspects of performance. Judgmental standards can be fairly applied. ² Potential fee would provide a meaningful incentive.
Elements	<ul style="list-style-type: none"> Estimated cost. A fixed fee. 	<ul style="list-style-type: none"> Target cost. Performance targets (optional). Minimum, maximum, and target fee. Ratio for adjusting fee based on actual costs and/or performance. 	<ul style="list-style-type: none"> Estimated cost. Standards for evaluating performance. Base and maximum fees. Procedures for adjusting "fee" based on performance against the standards.²
Contractor Is Obligated To:	Make a good faith effort to meet the Government's needs within the estimated cost in the Schedule.		
Contractor Incentive (<i>other than maximizing Goodwill</i>) ¹	Realizes a higher rate of return (i.e., fee divided by total cost) as total cost decreases. ³	Realizes a higher fee by completing the work at a lower cost and/or by meeting other objective performance targets.	Realizes a higher fee by meeting judgmental performance standards.
A Typical Application	Research study.	Research and development of the prototype for a major system.	Large scale research study.
Principal Limitation In FAR Parts 16, 32, 35, and 52	The contractor must have an adequate accounting system. The Government must exercise surveillance during performance to ensure use of efficient methods and cost controls. Must be negotiated. Must be justified. Statutory and regulatory limits on the fees that may be negotiated. Must include the applicable "Limitation of Cost" clause at FAR 52.232-20 through 23.		
Variants	Completion or Term.		

2.2.1 Base the Contract Type on Risk Analysis (Continued)

Major Types of Contracts (Cont.)

Continuation of the table presenting a comparison of the major contract types.

COMPARISON OF MAJOR TYPES OF CONTRACTS		
	<i>COST OR COST SHARING (C/CS)</i>	<i>TIME & MATERIALS (T&M)</i>
Principal Risk to Be Mitigated	Labor hours, labor mix, and/or material requirements (among other things) necessary to perform are highly uncertain and speculative. Hence, the Government assumes the risks inherent in the contract, benefitting if the actual cost is lower than the expected cost; losing if the work cannot be completed within the expected cost of performance.	
Use When:	<ul style="list-style-type: none"> The contractor expects substantial compensating benefits for absorbing part of the costs and/or foregoing fee, or The vendor is a nonprofit entity. 	Hourly labor rates can be firmly defined at contract award but hours required to complete the required task cannot.
Elements	<ul style="list-style-type: none"> Estimated cost. If CS, agreement on the Government's share of the cost. No fee. 	<ul style="list-style-type: none"> Ceiling price. Per hour labor rate that also covers overhead and profit. Provisions for reimbursing direct material costs plus material handling cost.
Contractor Is Obligated To:	Make a good faith effort to meet the Government's needs within the estimated cost in the Schedule.	Make a good faith effort to meet the Government's needs within the "ceiling price."
Contractor Incentive (other than maximizing Goodwill) ¹	CS shares the cost of providing a deliverable of mutual benefit.	Fixed rate and flexible hours to perform a task with unknown elements.
A Typical Application	Joint research with educational institutions.	Emergency repairs to heating plants and aircraft engines.
Principal Limitations In FAR Parts 16, 32, 35, and 52	The contractor must have an adequate accounting system. The Government must exercise surveillance during performance to ensure use of efficient methods and cost controls. Must be negotiated. Must be justified. Must include the applicable "Limitation of Cost" clause at FAR 52.232-20 through 23.	Contracting officer must determine in writing that no other contract type is suitable. Labor rate must be negotiated and justified. The Government must exercise appropriate surveillance to ensure efficient performance. Contract must include a ceiling price.
Variants		Labor Hour

- 1 Goodwill being the value of the name, reputation, location and other intangible assets of a firm.
- 2 Performance is evaluated by an Award Fee Panel with fee determined by a Fee Determining Official. Fee determinations are not subject to contract disputes provisions.
- 3 The CPFF contract is commonly used in situations where the Government is more interested in technical excellence than cost control. However, you must be aware that higher cost does not necessarily equal technical excellence. Contractors may attempt to shift unnecessary resources to CPFF contracts to control costs on other contracts.

2.2.2 Review Applicability of Socioeconomic Requirements

Introduction

Socioeconomic programs are established to achieve national social and economic goals. Several socioeconomic programs can affect your ability to solicit potential sources. The overall effect of these programs on competition and contract pricing must be considered in every contracting action.

Consider Program Effects

The following table summarizes some of the more important socioeconomic programs related to mandatory sources and identifies competition and pricing related circumstances where program application should be questioned.

	SOCIOECONOMIC SOURCING REQUIREMENTS	QUESTION WHEN...
FAR 19.5	Small Business Set-Aside	There is a reasonable expectation that: <ul style="list-style-type: none"> • Offers WILL NOT be obtained from at least two responsible small business concerns (The two concerns must offer products from different small business concerns unless the requirement is waived by SBA.) OR THAT • Award(s) WILL NOT be made at fair market prices.
FAR 19.502-2(a)	Total Set-Aside An acquisition must be reserved for exclusive participation by small business when there is a reasonable expectation that the requirements can be met by small business.	
FAR 19.502-3	Partial Set-Aside A portion of the acquisition is reserved for participation by small business when a total set-aside is not appropriate and the requirement is severable into two or more economic lots.	There is a reasonable expectation that ONLY two firms (one large and one small) with performance capability will respond to the solicitation.
FAR 20.201	Total Labor Surplus Area (LSA) Set-Aside Except for DoD, an acquisition must be reserved for exclusive participation by LSA concerns when there is a reasonable expectation that the requirements can be met by LSA concerns.	There is a reasonable expectation that offers WILL NOT be obtained from a sufficient number of LSA concerns so that awards will be made at reasonable prices.
FAR 20.201-1		

(Continued on next page)

2.2.2 Review Applicability of Socioeconomic Requirements (Continued)

Consider
Program Effects

Continuation of the table summarizing some of the more important socioeconomic programs related to mandatory sources identifying competition pricing related circumstances where program application should be questioned.

	SOCIOECONOMIC SOURCING REQUIREMENTS	QUESTION WHEN...
<p>FAR 19.806 FAR 19.807</p>	<p>8(a) Program</p> <p>Under Section 8(a) of the Small Business Act, contracts may be awarded to the Small Business Administration (SBA) for performance by eligible "8(a) firms." The SBA subcontracts may be awarded on a non-competitive or competitive basis.</p>	<p>There is a reasonable expectation that the contract price will exceed a fair market price. The negotiated contract price and estimate of a fair market price are subject to the concurrence of the SBA. (FAR 19.806 and FAR 19.807).</p>
<p>FAR 8.6</p>	<p>MANDATORY SOURCES</p> <p>Federal Prison Industries (FPI) or UNICOR</p> <p>Mandatory source for supplies of the classes listed in the "Schedule of Products Made in Federal Penal and Correctional Institutions."</p>	<p>The price of the required source exceeds open market prices.</p> <p>See FAR 8.604(c) on referring FPI prices that you believe exceed the market price to the cognizant FPI product division for resolution.</p>
<p>FAR 8.7</p>	<p>Committee for Purchase from the Blind and Other Severely Handicapped</p> <p>Mandatory source for supplies and services identified in the "Procurement List."</p>	<p>See FAR 8.707(f) on contacting the Committee at any time to make recommendations on price revision.</p>
<p>FAR 8.2</p>	<p>William Langer Plant, Rolla, ND</p> <p>Mandatory source for jeweled bearings and related items must be acquired from the plant or from other domestic manufacturers.</p>	<p>See FAR 8.203-3 on situations where relief may be granted from mandatory requirements in the best interest of the Government.</p>

2.2.3 Match Payment and Finance Terms to Market Conditions

Introduction

Under cost contracts, contractors are typically reimbursed for costs incurred on a monthly basis. Under fixed-price contracts, payment is made in a lump sum at contract completion unless other financing terms are provided for in the contract. Sometimes, you can attract a greater level of competition and lower priced offers by providing financing, relative to the costs of extending such financing.

Contractor Funding

Requiring contractors to fund the entire contract may severely limit competition, particularly with large contracts and long performance periods. Any firm that does submit an offer will probably offer a higher price to cover the cost of working capital. Recognizing the potential effects of required contractor funding on competition and pricing, you may want to consider other financial terms.

However, there are negative aspects to Government funding. Government funds are not free. The Government must also pay interest on borrowed capital. In addition, when the Government provides working capital support, the contractor has both the funds and the product. In the event of contractor default or bankruptcy, the Government may lose both the product and the funds.

Contract Financing Methods

The table below summarizes the most common methods.

PAYMENT OR FINANCING TERMS	DESCRIPTION	REQUIREMENTS FOR USE
Partial Payments	Partial payments for accepted supplies and services that are only part of the contract requirements. A method of payment that can assist contractors to participate in Government contracts with minimal financing.	Required for use whenever appropriate.
Progress Payments Based on Completion	Payments are commensurate with work accomplished, which meets contract quality standards. Commonly used in construction and shipbuilding.	Agency procedures must ensure that payments are commensurate with work accomplished. Payments may not exceed 80 percent of indefinite contract actions.

(Table continued on next page)

2.2.3 Match Payment and Finance Terms to Market Conditions (Continued)

Contract Financing Methods (Cont.)

Continuation of the table summarizing the contract financing methods.

	PAYMENT OR FINANCING TERMS	DESCRIPTION	REQUIREMENTS FOR USE
<p>FAR 32.501-1</p>	<p>Progress Payments on Cost</p>	<p>Payments are made based on costs incurred as work progresses. Payments may be customary or unusual. The customary rates for large and small business are established in FAR 32.501-1.</p>	<p>Customary progress payments may be included when the contract exceeds minimum dollar amounts, first deliveries will not be made for a substantial time after work begins, and there will be performance expenditures prior to delivery. Unusual payments will be made only if payments are approved by the head of the contracting activity or designee.</p>
<p>FAR 32.304-2</p>	<p>Loan Guarantees for Defense Production</p>	<p>Guarantees are made by Federal Reserve Banks to enable contractors to obtain financing from private sources under national defense contracts for supplies or services.</p>	<p>Annual maximums for guarantees set by Congress. Contractors apply through the Federal Reserve Bank. Loan approval requires a Certificate of Eligibility prepared by the contracting officer considering the requirements of FAR 32.304-2.</p>
<p>FAR 32.402</p>	<p>Advance Payments</p>	<p>Advances of money to a contractor before, in anticipation of, and for the purpose of complete performance under one or more contracts.</p>	<p>Advance payments are the least preferred method of contracting and should not be authorized if other types of financing are reasonably available. May be used only when statutory requirements and standards are met under FAR 32.402.</p>

2.2.4 Furnish Government Property

Introduction

Government-furnished property can be used in several ways to encourage competition and assure overall price reasonableness.

Description

The term **property** includes facilities, material, special tooling, special test equipment, and agency peculiar property. Different types of property can be used to affect competition and pricing.

Overview of Government Property

The table below provides an overview of the various types of Government property and how each type can be used to affect competition and pricing.

	TYPE OF PROPERTY	DEFINITION	COMPETITION AND PRICING CONSIDERATIONS
FAR 45.302	Facilities	Plant equipment and real property for production, maintenance, research, or testing furnished as Government facilities under situations identified in FAR 45.302.	Making facilities available can significantly increase competition for major production efforts, while eliminating the need for duplicative investment by competitors.
FAR 45.301	Material	Property that may be incorporated into or attached to a deliverable end item or that may be consumed or expended in performing a contract. It includes assemblies, components, parts, raw and processed materials, and small tools and supplies that may be consumed in normal use in performing a contract. (FAR 45.301)	Providing Government material can enhance competition in several situations. Breakout of key components can increase competition and reduce component prices. Furnishing proprietary components can increase effective competition on larger systems.

(Table continued on next page)

2.2.4 Furnish Government Property (Continued)

Overview of Government Property (Cont.)

Continuation of the table providing an overview of the various types of Government property and how each type can be used to affect competition and pricing.

	TYPE OF PROPERTY	DEFINITION	COMPETITION AND PRICING CONSIDERATIONS
<p style="text-align: center; border: 1px solid black; padding: 2px;">FAR 45.101</p>	<p>Special Tooling</p>	<p>Jigs, dies, fixtures, molds, patterns, taps, gauges, other equipment and manufacturing aids, components of these, all items, and replacement of these items, which are of such specialized nature that, without substantial modification, or alterations, their use is limited to the development or production of particular supplies or parts thereof, or to particular services. It does not include material, special test equipment, facilities (except foundations and similar improvements necessary for installing special tooling), general or special machine tools, or similar capital items.</p>	<p>Government provision of special tooling increases competition by reducing the need for investment that can only be used on one contract or project. Government ownership and right to move tooling limit producer ability to obtain a lock on the competition because of unique tooling capacity.</p>
<p style="text-align: center; border: 1px solid black; padding: 2px;">FAR 45.101</p>	<p>Special Test Equipment</p>	<p>Single or multipurpose integrated test units engineered, designed, fabricated, or modified to accomplish special purpose testing in performing a contract. It consists of items or assemblies of equipment including standard or general purpose items or components that are interconnected and interdependent so as to become a new functional entity for special testing purposes. It does not include material, special tooling, facilities (except foundations and similar improvements necessary for installing special test equipment), and plant equipment items used for general plant testing purposes.</p>	<p>Like special tooling, Government provision of special test equipment increases competition by reducing the need for investment that can only be used on one contract or project. Government ownership and right to move test equipment limit producer ability to obtain a lock on the competition because of unique tooling capacity.</p>

2.2.5 Minimize Cost of Warranty Requirements

Purpose

The principal purposes of a warranty in a Government contract are to:

- Delineate the rights and obligations of the contractor and the Government for defective work.
- Foster quality performance.

Warranty Use

Warranties generally are not mandatory. In determining whether a warranty is appropriate, you must consider the requirements of FAR 46.703. These include:

FAR 46.703

- Nature of the Product
 - Cost
 - Administration and Enforcement
 - Trade Practice
 - Reduced Requirements
-

Effect of
Warranty on
Competition and
Pricing

By agreeing to a warranty, contractors accept the risk of deferred liability. That acceptance of risk has associated costs, and contractors unwilling to accept that risk will drop from the competition.

Prices may rise both because of the increased risk and the reduced competition. It is therefore vital to understand the relationship between competition, price, warranty requirements, the nature of the product, and trade practice. Requirements that are unreasonable, given the nature of the product, will reduce competition and increase price. Requirements which significantly exceed trade practice will reduce competition and increase price. The perceived warranty benefits must be evaluated against the effects on competition and price.

Approval of
Warranty Use

The use of a warranty in a contract must be approved in accordance with agency procedures.

Control Warranty
Costs

To minimize warranty-related costs:

- Use commercial rather than Government-unique warranties.
 - Solicit the warranty as a separately price line item, which the Government may or may not award.
 - Solicit the warranty as a separately priced option (especially for distant outyears).
 - Talk the requiring activity out of a warranty requirement.
-

2.2.6 Optimize Price/Technical Trade-Offs

Introduction

The factors already considered in this chapter have the greatest effect on competition and contract price. There are, however, many other technical and business factors that can reduce competition and increase prices.

Factors that Reduce Competition

Factors that can reduce competition and increase prices include:

- Security Requirements
 - Payment Provisions That Increase Contractor Investment
 - Packaging Requirements That Require Survival Under Extreme Conditions
 - Unclear Instructions, Certifications, and Notices to Bidders/Offerors
 - Unclear Source Selection Criteria
 - Conflicting and Restrictive General Contract Clauses
-

Technical Evaluation Factors and Price

Technical evaluation factors invite offerors to submit higher prices as the tradeoff for a technically superior offer. Key questions to ask regarding proposed technical evaluation factors:

- Will the technical evaluation factor unnecessarily force the acquisition into a higher-priced market segment?
 - Will the technical factor constructively amend the specifications to require more than the Government's actual minimum needs?
 - Given the likely effect on contract price, is the factor truly necessary to minimize the technical or business risks inherent in the contract requirements?
 - Will use of the technical factor likely result in a "greater value" for the taxpayer?
-

Purchase Widgets (Cont.)

After reviewing the business terms in your solicitation, you are convinced that you are on the right track. You have a firm requirement with a known history. The risk is low and a firm fixed-price contract seems appropriate.

SECTION C

2.3 STRATEGIES FOR PUBLICIZING THE ACQUISITION

Overview

Introduction

Publicizing the contract action is one of the most important considerations in maximizing competition. If the solicitation never gets into the hands of potential sources, competition cannot occur.

As you decide how to publicize the buy, consider the potential effect on competition and contract price. If you can obtain dozens of competitive offers through a notice in the Commerce Business Daily (CBD), you probably do not need to be too concerned about more aggressive means of publicizing the buy. However, if the CBD notice is not likely to reach the strongest competitors, select the method of publicizing most likely to reach them.

As you publicize the buy, remember to allow enough time to receive requests for the solicitation. Of course you must also allow enough time after the solicitation is issued for firms to prepare appropriate offers.

In This Section

This section covers the following issues:

- Notice in the Contracting Office
 - Commerce Business Daily (CBD)
 - Handouts
 - Notices to Trade Associations
 - Announcements in Mass Media Without Cost
 - Electronic Bulletin Boards
 - Paid Advertisements
-

2.3 Strategies For Publicizing The Acquisition

Methods of Publicizing the Buy

The following table presents the different methods of publicizing the buy and situations where the method can provide the most useful results in increasing competition.

METHOD OF PUBLICIZING	DESCRIPTION	SITUATIONS WHERE METHOD IS PARTICULARLY USEFUL
Posting a Notice in the Contracting Office	<p>An unclassified notice of the solicitation or a copy of the solicitation.</p> <p>Required for all contract actions over \$10,000 (\$5,000 for DoD) but not over \$25,000.</p> <p>Posting for actions over \$25,000 is useful and may be required by agencies.</p>	<p>Will reach local sources willing to visit the contracting office at least once a week.</p> <p>Method is especially useful in providing notice of requirements to local small business.</p>
<p>Commerce Business Daily (CBD) Synopsis</p> <p>FAR 5.207</p>	<p>A synopsis of upcoming acquisitions following the format in FAR 5.207.</p> <p>Required for all nonexempt supply and service purchase actions over \$25,000.</p>	<p>Will reach interested national and international sources interested in competing for prime contracts.</p> <p>Method is especially useful in providing notice of larger requirements that will attract distant sources.</p>

(Table continued on next page)

2.3 Strategies For Publicizing The Acquisition (Continued)

Methods of Publicizing the Buy (Cont.)

Continuation of the table presenting different methods of publicizing the buy and situations where the method can provide the most useful results in increasing competition.

METHOD OF PUBLICIZING	DESCRIPTION	SITUATIONS WHERE METHOD IS PARTICULARLY USEFUL
Commerce Business Daily (CBD) Synopsis (Cont.)	A synopsis of contract awards. Required for all nonexempt supply and service purchase actions over \$25,000 subject to Trade Agreements Act, or likely to result in many subcontracts.	Will reach interested national and international sources interested in competing for subcontracts.
Handouts	Listings or synopses of proposed contracts published periodically, normally once a week. May be posted much like notices required for contracting offices or in other locations convenient for local sources.	Like required notices, will reach local sources willing to visit the designated location. By providing the information in a usable format, handouts make collecting information easier for potential sources and may increase competition.
Notices to Trade Associations	Handouts or similar publications may be distributed to trade associations with a membership potentially interested in contracting to provide required goods and services. Smaller requirements may be publicized through local associations, larger requirements through both local and national associations.	Providing information to trade associations directly presents requirements to firms in the trade that may never have considered Government business.

(Table continued on next page)

2.3 Strategies For Publicizing The Acquisition (Continued)

Methods of Publicizing the Buy (Cont.)

Continuation of the table presenting different methods of publicizing the buy and situations where the method can provide the most useful results in increasing competition.

METHOD OF PUBLICIZING	DESCRIPTION	SITUATIONS WHERE METHOD IS PARTICULARLY USEFUL
Announcements to Mass Media Without Cost	<p>Announcements can be made in the form of news releases to newspapers, magazines, or other mass media without cost.</p> <p>Announcements may be made about any significant proposed purchase, but larger requirements and traditionally non-competitive requirements will likely be considered the most newsworthy.</p>	<p>Will reach firms that may never have considered Government business.</p> <p>Firms may even consider it good public relations to compete for proposed contracts mentioned in the mass media.</p>
Electronic Bulletin Boards	<p>Dissemination of requirements lists or synopses through use of computerized dial-in sources known as bulletin boards can provide immediate requirements information to local or national sources.</p> <p>To be effective, broad publicity must be used to inform the public of the existence of the bulletin board.</p>	<p>Can provide broad information on all requirements or tailored to particular classes of requirements, possibly in conjunction with trade associations.</p>

(Table continued on next page)

2.3 Strategies For Publicizing The Acquisition (Continued)

Methods of Publicizing the Buy (Cont.)

Continuation of the table presenting different methods of publicizing the buy and situations where the method can provide the most useful results in increasing competition.

METHOD OF PUBLICIZING	DESCRIPTION	SITUATIONS WHERE METHOD IS PARTICULARLY USEFUL
Paid Advertisements	<p>Orders for paid advertising may be placed directly with the media or through an advertising agency.</p> <p>Paid advertisements in newspapers and other communications media can only be used when it is anticipated that competition cannot be obtained otherwise.</p> <p>Newspaper advertisements must be approved by the agency head or designee.</p>	<p>Can be tailored to the particular needs of the Government. Advertising can be local or national depending on the requirement. A single newspaper or several in a region may be used.</p> <p>Paid advertisements get the exact message the Government wants to send to businesses in the identified target area, whether or not the business is specifically trying to identify Government requirements.</p>

Purchase Widgets (Cont.)

You have already submitted your synopsis for the Commerce Business Daily (CBD). You hope the synopsis will identify new widget sources. You have also posted the requirement on your contracting office solicitation bulletin board. Since you know that you have already identified the major widget producers in the United States for your source list, it appears that additional efforts to identify sources are unnecessary.

CHAPTER 3

PRICE-RELATED DATA FROM OFFERORS

Learning Objectives

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective 3/1

Identify contract actions for which certified cost or pricing data are required.

Classroom Learning Objective 3/2

Determine whether an offeror is exempt from submitting or certifying cost or pricing data based on adequate price competition, regulated pricing, catalog pricing, or market pricing.

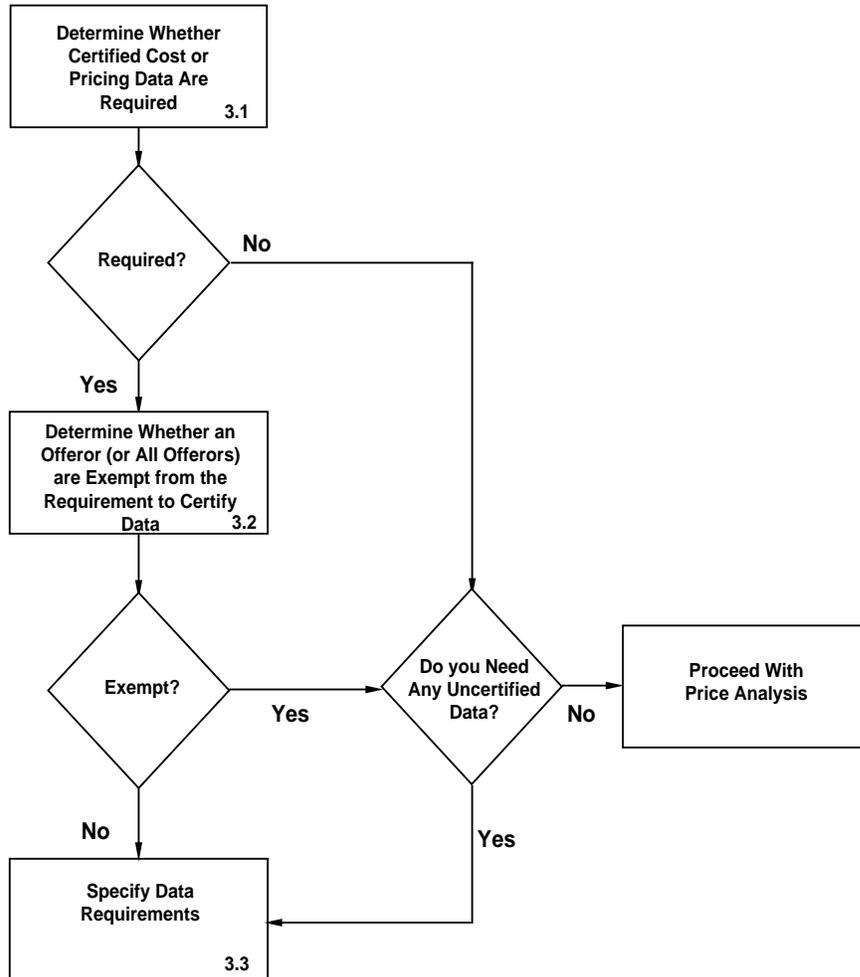
Classroom Learning Objective 3/3

Identify additional price-related offeror data necessary for making decisions on price reasonableness.

Procedural Steps

Procedural Steps

The following figure shows the sequence of events or steps that you should follow in determining the price-related data to require or request from offerors.



Chapter Overview

Introduction

You have taken several important steps toward identifying sources of data and collecting the kinds of information that will enhance your product knowledge and enable you to effectively estimate proper price levels. Such data collection begins before the solicitation is issued, and continues throughout the purchase decision process.

This Chapter

This chapter covers the steps you will take to determine what data will be needed from offerors to support the pricing decision:

SECTION	DESCRIPTION	SEE PAGE
A	3.1 Step 1: Determine Certified Cost or Pricing Data Requirements	3-7
	3.1.1 Identify Situations Requiring Certified Cost or Pricing Data	3-9
	3.1.2 Determine Requirement for Certified Cost or Pricing Data for Purchases under \$100,000	3-11
B	3.2 Step 2: Determine Applicability of Exemptions from Cost or Pricing Data Requirements	3-15
	3.2.1 Review Exemptions and Waivers to Certified Cost or Pricing Data Requirements	3-16
	3.2.2 Determine Whether Adequate Price Competition Exists	3-19
	3.2.3 Determine Exemptions Based On Adequate Price Competition	3-23
	3.2.4 Determine Exemptions Based On Catalog Prices	3-24
	3.2.5 Determine Exemptions Based On Market Prices	3-32
	3.2.6 Determine Exemptions For Regulated Prices	3-35

(Continued on next page)

Chapter Overview (Continued)

This Chapter
(Cont.)

Continuation of the steps you will take to determine what data will be needed from offerors to support the pricing decision:

SECTION	DESCRIPTION	SEE PAGE
C	3.3 Step 3: Identify Additional Data Needed from the Offeror to Support an Offered Price	3-37
	3.3.1 Identify Other Necessary Price Related Data	3-38
	3.3.2 Identify Necessary Uncertified Cost Data	3-40

Purchase Widgets (Cont.)

This acquisition began when you received a purchase request for 98 widgets. After analyzing available market data, you developed a preliminary price estimate of \$925 a unit for a total of \$90,650.

During your research, you determined that the user has a requirement for 98 additional widgets identical to the 98 widgets identified on the purchase request. The user had intended to request the additional units in about two months. Working with the user, you obtained a second purchase request for 98 units and combined the two requirements into a total contract requirement of 196 units to maximize competition and minimize total cost to the Government.

Your preliminary estimate of the unit price for 196 units is still \$925, with a total price of \$181,300.

Now you must determine whether you should require offerors to submit Certified Current Cost or Pricing Data.

SECTION A

STEP 1

3.1 DETERMINE CERTIFIED COST OR PRICING DATA REQUIREMENTS

Overview

Introduction

Use cost analysis to establish prenegotiation objectives when price reasonableness cannot be determined from price analysis alone. Remember that cost analysis is required for contract actions over \$100,000, unless price is based on adequate price competition, catalog prices, market prices, or regulated prices.

For contracts awarded after December 5, 1990, the threshold has been changed to \$500,000 in the Department of Defense (DoD), National Aeronautics and Space Administration (NASA), and the Coast Guard.

The data requirements described in this chapter apply only to acquisition by negotiation. Because the use of sealed bidding assumes adequate price competition, you SHALL NOT require the submission of cost data with the bid. You may only require bidders to submit the data necessary to apply any price-related data identified in the invitation for bid (IFB), such as data necessary to apply the price-related factors described in Chapter 5.

Certificate of Current Cost or Pricing Data

When you perform a cost analysis, you will ask the offeror to submit the cost or pricing data necessary for your analysis. Under certain circumstances, after all negotiations are complete, you will ask the offeror to submit a Certificate of Current Cost or Pricing Data. This certificate provides a legal record that the offeror certifies, to the best of his/her knowledge, that the cost or pricing data provided in the proposal and during negotiations are accurate, complete, and current.

Keep in mind that a Certificate of Current Cost or Pricing Data is not a substitute for effective analysis.

(Continued on next page)

Overview (Continued)

Defective Pricing

If, after contract award, you determine that the data submitted by an offeror are not accurate, complete, and current, the data are said to be defective. Thus, pricing based on that data is **defective pricing**.

If the evidence indicates that the Government would have negotiated a lower price if the cost or pricing data had not been defective, the Government is entitled to a price adjustment, including profit or fee. The amount of this adjustment is any significant amount by which the price was increased because of the defective data, under the terms of contract clauses set forth in the contract, less offsets (if any).

In this section

This section covers the specific steps you will take to Determine Certified Cost or Pricing Data Requirements.

TOPIC	SEE PAGE
3.1.1 Identify Situations Requiring Certified Cost or Pricing Data	3-9
3.1.2 Determine Requirement for Certified Cost or Pricing Data for Purchases under \$100,000	3-11

3.1.1 Identify Situations Requiring Certified Cost or Pricing Data

Introduction

Submission of data does not mean that the offeror must complete a Certification of Current Cost or Pricing Data. The requirement for certification depends on:

- Method of procurement
- Dollars involved
- Available exemptions
- Special justifications documented by the contracting officer

General requirements for Certified Cost or Pricing Data are presented in the table on the next page.

(Continued on next page)

3.1.1 Identify Situations Requiring Certified Cost or Pricing Data (Continued)

When to Require Certified Cost or Pricing Data

Use the following table to determine whether to require certified cost or pricing data:

CERTIFICATION REQUIRED?			
TYPE OF CONTRACT ACTION	\$25,000 OR LESS	MORE THAN \$25,000 BUT NOT MORE THAN \$100,000	MORE THAN \$100,000 ¹
New contract price proposal, including options priced in the contract.	NEVER	Only if the contracting officer justifies the requirement in writing and includes the documentation in the contract file.	YES, unless proposal can be exempted based on: <ul style="list-style-type: none"> • adequate price competition. • catalog pricing. • market pricing. • regulated pricing.
New subcontract price proposal, when cost or pricing data are required of the prime and higher tier subcontractors.			
Contract modification, considering the absolute value ² of related price adjustments. NOTE: Negotiated final pricing actions, such as terminations and final price agreements for fixed-price incentive and redeterminable contracts are contract modifications.			YES, UNLESS the modification can be EXEMPTED based on: <ul style="list-style-type: none"> • catalog pricing. • market pricing. • regulated pricing. • exercising an option priced as part of the original contract.
Subcontract modification considering total related changes (price increases plus decreases), when cost or pricing data are required of the prime and higher tier subcontractors.			

¹ \$500,000 for DoD, NASA, and the Coast Guard, for contracts awarded after December 5, 1990.

² \$For example, a \$30,000 modification resulting from a reduction of \$70,000 and an increase of \$40,000 in related work is a pricing adjustment that exceeds \$100,000. The reason is that the modification covers \$70,000 of work taken from the requirement plus an addition of \$40,000 in new related work (\$110,000). You may sometimes, for convenience, combine several unrelated and separately priced changes in one contract modification. If the individual changes would not require certified cost or pricing data, you would not be required to obtain the data even though the total price, added together, exceeds the dollar threshold.

3.1.2 Determine Requirement for Certified Cost or Pricing Data for Purchases under \$100,000

Introduction

FAR 15.804-2(a)(2)

“If certified cost or pricing data are needed for pricing actions over \$25,000, and not in excess of \$100,000¹, they may be obtained. There should be relatively few instances where certified cost or pricing data and inclusion of defective pricing clauses would be justified in awards between \$25,000 and \$100,000. The data which the contracting officer requires to be submitted shall be limited to that data necessary to determine the reasonableness of the price. Whenever certified cost or pricing data are required for pricing actions of \$100,000 or less, the contracting officer shall document the file to justify the requirement.” (FAR 15.804-2(a)(2))

Cost Proposal Decision Table

Use the table below to determine when submission of a cost proposal is necessary **for actions under \$100,000**.¹

FAR 15.804-6(a)

IF UNDER \$100,000 AND...	THEN....
Price analysis alone WILL suffice to determine that the low offer is fair and reasonable.	DO NOT require the submission of a cost proposal (certified or not) in the RFP. ²
Price analysis alone WILL NOT suffice to determine that the low offer is fair and reasonable.	You need a cost proposal from the offeror. You must now decide whether or not to require certification of that proposal. Certification should be required only for those few actions in which the benefits of certification justify the costs.

¹ Or under \$500,000 for DoD, NASA, and the Coast Guard, for contracts awarded after December 5, 1990.

² After receipt of the proposal(s), you may find that price analysis alone will not suffice (e.g., only one offeror submitted a proposal, or the price competition was otherwise not adequate). If that turns out to be the case, you may at that time require a cost breakdown from the offeror (see FAR 15.804-6(a)(1)), as described in Chapter 10.

3.1.2 Determine Requirement for Certified Cost or Pricing Data for Purchases under \$100,000 (Continued)

Benefits vs.
Costs

The benefits and costs of obtaining certified cost or pricing data can be summarized as follows:

BENEFITS:

- Certification may result in the negotiation of a more favorable price to the Government than otherwise obtainable.
- The contractor must make complete data available to you (i.e., "all facts as of the date of price agreement that prudent buyers and sellers would reasonably expect to affect price negotiations significantly").
- You have legal certification that submitted cost or pricing data are accurate, complete, and current at the time of price agreement.
- You have rights under contract defective pricing provisions.

COSTS:

- There is a cost to the contractor in time and dollars to prepare, update, and track "complete" data—over and above the cost of providing the more limited data that might suffice for verifying price reasonableness.
- There is a cost to the Government in time and dollars to audit and analyze "certified" data.
- There is a cost related to the extended lead time needed for proposal analysis, if you have to go through an entire cost proposal instead of working with more limited data.
- There is a cost to the Government of sources lost because offerors are unable or unwilling to submit certified data.
- If data are defective, there is a cost associated with auditing, analyzing, and negotiating an appropriate price reduction.

(Continued on next page)

3.1.2 Determine Requirement for Certified Cost or Pricing Data for Purchases under \$100,000 (Continued)

Situations Where Benefits Normally Exceed Costs

FAR 15.804-2(a)(2)

Give special consideration to requiring certified cost or pricing data if the offeror, contractor, or subcontractor:

- Has been the subject of recent or recurring and significant findings of defective pricing,
- Currently has significant deficiencies in cost estimating systems, or
- Has recently been indicted for, convicted of, or the subject of an administrative or judicial finding of fraud regarding its cost estimating systems or cost accounting practices.¹

Even if you require Certified Cost and Pricing Data for a contract action, the offeror may respond with an SF 1412 that claims an exemption based on catalog or market pricing. The next section deals with those and other types of exemptions to requirements for certified cost or pricing data.

¹ FAC 90-10.

Purchase Widgets (Cont.)

Obviously, your requirement meets the general requirement for obtaining Certified Current Cost or Pricing Data. Your preliminary price estimate of \$181,300 is substantially more than \$100,000.

But, you noted in the last section that a purchase can be exempted from the general requirement for Certified Current Cost or Pricing Data. You need to know whether your purchase qualifies for an exemption.

SECTION B

STEP 2

3.2 DETERMINE APPLICABILITY OF EXEMPTIONS FROM COST OR PRICING DATA REQUIREMENTS

Overview

In this section

This section covers the specific steps you will take to Determine Applicability of Exemptions from Cost or Pricing Data Requirements

TOPIC	SEE PAGE
3.2.1 Review Exemptions and Waivers to Certified Cost or Pricing Data Requirements	3-16
3.2.2 Determine Whether Adequate Price Competition Exists	3-19
3.2.2.1 Determine Whether Price Competition Exists	3-20
3.2.2.2 Determine the Adequacy of Price Competition	3-21
3.2.3 Determine Exemptions Based On Adequate Price Competition	
3.2.4 Determine Exemptions Based On Catalog Prices	3-24
3.2.5 Determine Exemptions Based On Market Prices	3-32
3.2.6 Determine Exemptions Based On Regulated Prices	3-35

3.2.1 Review Exemptions and Waivers to Certified Cost or Pricing Data Requirements

Introduction	You must require a Certificate of Current Cost or Pricing Data for all contract actions over \$100,000 ¹ unless a specific exemption applies or a waiver is granted.
Exemption Due to Adequate Price Competition	When adequate price competition exists, all offerors are exempted from submission of certified cost or pricing data. Individual offerors are not required to claim an exemption.
Exemptions Because of Catalog, Market or Regulated Pricing	Exemptions from submission of a Certificate of Current Cost or Pricing Data because of catalog pricing, market pricing, or pricing set by law or regulation are typically granted only after an exemption has been claimed by the offeror and approved by the contracting officer. These exemptions apply only to the offeror claiming the exemption and the particular product identified in the claim for exemption.
Form SF 1412	Unless your agency's regulations or your contracting officer instructs you otherwise, tell the offeror to claim the exemption using the Standard Form (SF) 1412, "Claim for Exemption from Submission of Certified Cost or Pricing Data". When an exemption is claimed for more than one item in a proposal, require a separate SF 1412 for every item exceeding \$50,000 (i.e., unit price multiplied by total quantity to be acquired), except as otherwise provided in the solicitation. ² If none exceeds \$50,000, obtain an SF 1412 for the item that has the highest value.
Exemptions Without SF 1412	You may grant an exemption without requiring submission of a SF 1412 when: <ul style="list-style-type: none">• The Government has acted favorably on an exemption claim for the same item or similar items within the past year. In such a case, unless otherwise directed by the contracting officer, the offeror may submit the following, instead of the SF 1412:<ul style="list-style-type: none">- A copy of the prior claim and related Government action

(Continued on next page)

¹ \$500,000 for DoD, NASA, and the Coast Guard, for contracts awarded after December 5, 1990.

² FAC 90-10.

3.2.1 Review Exemptions and Waivers to Certified Cost or Pricing Data Requirements (Continued)

Exemptions
Without SF 1412
(Cont.)

-
- A statement to the effect that to the offeror's knowledge, except as set forth in the statement, there have been no changes for the item in terms of:
 - √ Catalog price or discounts
 - √ Volume of actual sales
 - √ Ratio of sales to the Government
 - Special arrangements for submission of exemption claims have been made in anticipation of repetitive acquisitions of catalog items.
 - There is evidence, before solicitation, that the item has an acceptable established catalog price. Evidence may include:
 - Recent submissions by offerors
 - The contracting officer's knowledge of market conditions, prevailing prices, or sources.
 - There is evidence of a General Services Administration (GSA) multiple award schedule contract for the item.

Individual or
Class
Exemptions

FAR 15.804-3(g)

"The chief of the contracting office may authorize individual or class exemptions for exceptional cases when the contracting officer recommends that an exemption should be made, even though the case does not strictly meet all the criteria for a catalog-price or market-price exemption. The quantity and prices offered to the Government, and the price relationships as influenced by prevailing trade practices, are the important factors to consider. The Government's need and the prospective contractor's resistance are not appropriate considerations."

Waiver of
Certified Data
Requirements

Waiver of requirements for certified cost or pricing data in exceptional cases is possible. However, the waiver is NOT within the authority of the Contracting Officer. Only an agency head, or designate, may waive the requirements. This waiver, along with the justifications, MUST be in writing. RARELY ARE WAIVERS GRANTED, and should be considered only in situations where the offeror refuses to submit data and there is overwhelming evidence that the public interest will be served by granting the waiver.

(Continued on next page)

3.2.1 Review Exemptions and Waivers to Certified Cost or Pricing Data Requirements (Continued)

Exemptions to Certification Requirements

Use the table below to review the possible exemptions to requirements for submitting a Certificate of Current Cost or Pricing Data for a given action:

EXEMPTIONS TO CERTIFICATION REQUIREMENTS	
EXEMPTION	REQUIRED CONDITIONS
Adequate price competition; FAR 15.804-3(b)(1)&(2)*	<p>Two or more responsible, responsive offerors competing independently for a contract to be awarded to the responsible offeror with the lowest evaluated price.</p> <p>If price competition exists, you must presume that it is adequate unless:</p> <ul style="list-style-type: none"> • The solicitation is made under conditions that unreasonably deny one or more known and qualified offerors the opportunity to compete. • The low offeror has such a decided advantage that it is practically immune from competition. • There is a finding, supported by a statement of the facts and approved at a level above the contracting officer, that the price is unreasonable.
"Based on" adequate price competition; FAR 15.804-3(b)(3)	Price analysis alone can establish price reasonableness, despite the absence of direct competition, through comparison with current or recent prices for the same or substantially the same items purchased in comparable quantities, terms, and conditions as a result of adequate price competition.
Established catalog or market prices; FAR 15.804-3(c)	Prices are based on established catalog or market prices for a commercial item sold in substantial quantities to the general public.
"Based on" catalog or market price; FAR 15.804-3(c)(6)	The item being purchased is sufficiently similar to a commercial item sold in significant quantities to the general public to permit any difference in prices between the items to be identified and justified without resort to cost analysis.
Prices set by law or regulation; FAR 15.804-3(d)	Laws, regulations, or pronouncements in the form of periodic rulings, reviews, or similar actions of a governmental body are sufficient to establish the price.

More information on each exemption and the conditions required to grant the exemption are presented on the pages that follow.

3.2.2 Determine Whether Adequate Price Competition Exists

Introduction Adequate price competition cannot exist unless all the required conditions for competition are met.

Presolicitation You should refrain from requiring the submission of certified cost or pricing data in the RFP if you expect to award on the basis of adequate price competition. To decide whether or not you can reasonably expect such competition, ask the following questions:

1. Are you planning to solicit offers from more than one firm?
2. Will the contract be awarded to the responsible offeror submitting the lowest evaluated price?¹
3. Is it reasonable to assume, prior to soliciting, that the competition will be adequate?²

Use the following table to answer the above questions:

IF...	THEN...
<ul style="list-style-type: none"> • Your answer to any of the above questions is NO, and • Prior to solicitation, no other exemption applies (e.g., you cannot rely on market pricing or pricing "based on" adequate price competition) 	<p>Require the offeror or offerors, in the RFP, to submit Certified Cost or Pricing Data.</p>

(Continued on next page)

¹ Note, however that "greatest value" competitions are generally construed as constituting award "to the responsible offeror submitting the lowest evaluated price" as long as price is a substantial (and not necessarily the predominant) factor in the award decision. The Comptroller General has found adequate price competition in cases where price was assigned a weight of only 20 percent in the award decision; see Comptroller General (Comp Gen) decisions B-176217 and B-189884.

² If you anticipate competition, generally assume that the competition will be adequate unless, prior to solicitation, you already have evidence that:

- One of the prospective offerors has a determinative advantage, or that
- The conditions of the solicitation will unreasonably deny to one or more known and qualified offerors an opportunity to compete.

3.2.2.1 Determine Whether Price Competition Exists

Post-Closing

Suppose you refrained from requesting cost or pricing data in the RFP on an expectation of adequate price competition. In that case, after the closing date for proposals, you must determine:

1. Whether price competition in fact occurred, and
2. The adequacy of that competition.

In making this determination, you will use methods and procedures covered later in this textbook (chapters 5-8).

Consider the following decision table to answer the first question:

(FAR 6.301(c))

IF...	THEN...
There is only one offer.	Price competition does not exist.
There is only one responsive ¹ offer from a responsible offeror.	Price competition does not exist.
The offerors did not compete independently (e.g., were collusive).	Price competition does not exist.
Only one brand name and part number is acceptable	Price competition does not exist no matter how many offers are received. (FAR 6.301(c)). Offers cannot be independent, because all depend on the same manufacturer.
Offers all come from different divisions of the same corporation.	Price competition does not exist. Offers are not independent.
Award will be made based on greatest value, considering <u>both</u> price-related <u>and</u> technical ranking factors.	Price competition exists only if price is a substantial evaluation factor. ²
Award will be made based solely on technical factors.	Price competition does not exist.

¹ For example, when only one proposal is technically within the competitive range.

² The Comptroller General has found adequate price competition in cases where price was assigned a weight of only 20 percent in the award decision; see Comptroller General (Comp Gen) decisions B-176217 and B-189884.

3.2.2.2 Determine the Adequacy of Price Competition

General Criteria

If price competition exists, you must presume that it is adequate unless:

- The solicitation is made under conditions that unreasonably deny one or more known and qualified offerors the opportunity to compete.
 - The low offeror has such a decided advantage that it is practically immune from competition.
 - There is a finding, supported by a statement of the facts and approved at a level above the contracting officer, that the price is unreasonable.
-

Conditions that Unreasonably Deny the Right to Compete

Typically, conditions that unreasonably deny a potential offeror the right to compete become known when a would-be offeror protests or when a traditional source fails to respond to the solicitation. Any of the barriers to competition presented in Chapter 2 may unreasonably exclude a potential offeror.

When the Low Offeror Has an Advantage

Of the three situations listed above, the one most difficult to analyze is probably the situation where the low offeror may have such a decided advantage that it is practically immune to competition.

A price that is significantly lower than that of competitors may be an indicator that the low offeror has a lock on the competition. However, a low price alone is not sufficient reason to require submission of Certified Cost of Pricing Data.

When a decided advantage is suspected, ask these questions:

- Does the low offeror have a significant investment in special tooling or plant layout to produce this product, that may have been charged to earlier production and now forms a "free resource" that is not held by the competition?
 - Does the low offeror produce a vital component that forms a significant portion of contract price and must be purchased from the firm by potential competitors?
 - Is the sales volume of the low offeror so high that no other source can sell the item at a competitive price without taking an unacceptable risk of losing money?
-

(Continued on next page)

3.2.2.2 Determine the Adequacy of Price Competition (Continued)

Unreasonably
High Prices

You may tend to assume that any price that results from price competition is fair and reasonable. This is not always true.

Remember that, even if a price results from apparent competition, you must still conduct a price analysis as taught in Chapters 5-8 of this text/reference. If this analysis indicates that the lowest Best and Final Offer is unreasonably high, prepare a finding to that effect, supported by the facts, for approval at a level above the contracting officer.

Consequences of
Inadequacy

FAR 15.804-6

In Chapter 10, we will examine your options when you decide that the price competition has not been adequate. One alternative is to request a cost breakdown from the low offeror, with certification. FAR 15.804-6 provides that "even if the solicitation does not so specify, however, the contracting officer is not precluded from requesting such data if they are later found necessary."

That is not, however, the only alternative. For instance, you have the option of cancelling and resoliciting the RFP if it includes an unnecessary feature that has effectively "thrown" the competition.

3.2.3 Determine Exemptions Based on Adequate Price Competition

Introduction

A price is "based on" adequate price competition if:

- the price results directly from price competition

or

 - price analysis alone clearly demonstrates that the proposed price is reasonable in comparison with current or recent prices for the same, or substantially the same, items purchased in comparable quantities, terms, and conditions that resulted from adequate price competition.
-

Applications

Two common applications of pricing "based on" adequate price competition include **option prices** and **recent competitive prices**.

- **Option prices.** Option prices included in a competitive contract are considered to be based on adequate price competition. The exercise of an option at the price established in the contract through adequate price competition is exempt from the requirement for a Certificate of Current Cost or Pricing Data.
 - **Recent competitive prices.** Proposal prices generally may be considered to be based on competition and exempt from submission of a Certificate of Current Cost or Pricing Data when all of the following four conditions are met:
 - Item or service has been bought competitively within the last year.
 - Item or service, for good reason, is not being purchased competitively this time.
 - Current purchase quantities, terms, and conditions are comparable with recent purchases.
 - Price analysis comparisons between the current price and the recent competitive price clearly demonstrate price reasonableness.
-

FAR 15.804-3(b)(3)

3.2.4 Determine Exemptions Based on Catalog Pricing

General Criteria

You can exempt an offeror's proposal from the requirement for submission of certified cost or pricing data, based on catalog pricing, if you can answer three questions affirmatively:

- Are the prices, or are the prices based on, *established catalog prices*?
 - Are the items *commercial items*?
 - Are the items sold in *substantial quantities* to the *general public*?
-

Definition -
Established
Catalog Price

A catalog price is not a quote or one-time price prepared by a salesperson at the point of sale. An **established catalog price** must be recorded in a form regularly maintained by the producer or vendor of the item or service. The record must:

- Be published or otherwise available to the customer for inspection.
 - State current or last sales price to a significant number of buyers constituting the general public.
-

Definition -
Commercial
Items

Commercial items are supplies and services regularly used for other than Government purposes and sold or traded to the general public in the course of normal business operations.

Definition -
Substantial
Quantities

Items are sold in **substantial quantities** when the quantities sold constitute a real commercial market. Small quantities such as models, samples, prototypes, or experimental units are not considered substantial. For services to be considered as sold in substantial quantities, they must customarily be provided by the offeror, using regularly employed personnel and equipment, and regularly maintained solely or principally to provide the services. The number of units sold at catalog prices may be few compared to sales by other firms, as long as these units represent a significant portion of that firm's total sales to the general public (see the Catalog Pricing Exemption Decision Table below for criteria to determine whether the claimed exemption meets the "substantial quantities" test).

Definition -
General Public

The general public is a significant number of buyers other than the Government or affiliates of the offeror who are purchasing the item for other than Government use. Items purchased by contractors and

(Continued on next page)

3.2.4 Determine Exemption Based on Catalog Pricing (Continued)

Definition -
General Public
(con't)

subcontractors for Government end use are considered sales to the Government, not sales to the general public. Items purchased by the Government for foreign military sales are not sales to the general public, but items sold directly to foreign governments are considered sales to the general public.

Pricing Based on
Catalog Prices

A price may be considered to be "based on" a catalog price only if the item being purchased is sufficiently similar to the catalog priced commercial item to ensure that any difference in prices can be identified and justified without resort to cost analysis.

Pricing
Substantially
Similar Items

If an item is substantially similar to a catalog priced commercial item, but the price proposed cannot be explained through price analysis alone, you should limit any requirement for cost or pricing data to those data that pertain to the differences between the items.

When the total contract price related to differences between the catalog priced item and the proposed item is \$100,000¹ or more, you must require submission of certified cost or pricing data to identify and justify that difference (unless an exception is granted for the entire quantity).

Verification
Using the
Standard Form
1412

The catalog pricing exemption is normally claimed using Section I of the SF 1412. Once the SF 1412 is obtained, the data presented must be carefully analyzed before granting an exemption to the submission of a Certificate of Current Cost or Pricing Data. (See page 3-29 for a copy of the SF 1412).

Review
Information
Submitted

Before beginning your analysis, review the instructions to offerors on the back of the form. If the required information has not been submitted, reject the claim for an exemption.

(Continued on next page)

¹ \$500,000 for DoD, NASA, and the Coast Guard, for contracts awarded after December 5, 1990.

3.2.4 Determine Exemption Based on Catalog Pricing (Continued)

Form 1412
Item 7

Check Form 1412, Item 7:

- Did the offeror identify the current catalog and data?
- Did the offeror attach a copy of the catalog, or appropriate pages, or a statement that the catalog is on file in the buying office to which the proposal is made?
- Did the offeror identify any differences that exist between the catalog item and the item proposed and explain how the proposed price is derived from the catalog price?

Form 1412
Item 8

Check Form 1412, Item 8:

- Does the sales period indicated by the offeror include the most recent sales data that are reasonably available?
- Does the sales period indicated by the offeror extend back far enough to provide a period representative of average sales?
- If the offeror feels that the most recent sales are abnormal, did the offeror include prior sales data up to two years old to demonstrate normal sales experience?

Form 1412
Item 9

Check Form 1412, Item 9:

- Did offeror correctly annotate the units sold during the most recently completed sales period according to designated categories?
 - Category A—Sales to the Federal Government
 - Category B—Sales at catalog price to the general public
 - Category C—Other sales to the general public

Form 1412
Item 11

Check Form 1412, Item 11:

- On Line a, did the offeror insert information on the lowest priced sale of the item to the general public during the stated sales period, regardless of quantity?
- On Lines b and c, did the offeror insert information on sales of the item during the identified sales period, in the following order of preference?
 - Lowest priced Category C sale of comparable quantities.
 - Lowest priced Category C sale of quantities most comparable to the quantities offered.
 - Lowest priced Category B sale of comparable quantities.
 - Lowest priced Category B sale of quantities most comparable to the quantities offered.

Analyzing Claim
Information

The primary test for determining if an item is sold as a catalog priced item is an analysis of the information presented concerning units sold.

(Continued on next page)

3.2.4 Determine Exemption Based on Catalog Pricing (Continued)

Exemption Decision Table Generally use the table below to determine whether the sales at the catalog price meet the "substantial quantities" test.

WHEN...	
A = Sales to the Federal Government B = Sales at Catalog Price to the General Public C = Other Sales to the General Public B+C = All Sales to the General Public A+B+C = Total Sales	
IF....	THEN....
$B+C \geq 55\%$ of $A+B+C$ and $B \geq 75\%$ of $B+C$	The catalog pricing exemption usually applies.
$B+C < 35\%$ of $A+B+C$ or $B < 55\%$ of $B+C$	The catalog pricing exemption rarely applies.
$B+C \geq 35\%$ but $< 55\%$ of $A+B+C$ or $B \geq 55\%$ but $< 75\%$ of $B+C$	Further investigation is required.

Caveats:

1. Be careful in using this table for "thin" markets. A "thin" market is one in which an extremely small number of items are bought and sold. For instance, suppose a vendor only sold nine units all year—five to the general public and four at the "catalog" price. Given such few sales at the catalog price, investigate further.

FAR 15.804-3(c)(4)

Remember that items must be sold in substantial quantities — that is, “when the quantities regularly sold are sufficient to constitute a real commercial market. Nominal quantities, such as models, samples, prototypes, or experimental units — do not meet this requirement.”

2. Remember that sales at catalog price to the general public include those at published discounts.
3. Even if " $B < 55\%$ of $B+C$ ", a catalog price exemption might be supportable if data supplied by the offeror demonstrate that Category C sales are at prices that reflect consistently applied discounts based on class of customer or quantity. If such a pattern seems apparent, investigate further.

The next two pages contain a copy of:

Standard Form 1412
Prescribed by GSA
FAR (48 CFR) 53.215-2(b)

Standard Form 1412 Back

CLAIM FOR EXEMPTION FROM SUBMISSION OF CERTIFIED COST OR PRICING DATA

FORM APPROVED OMB NO.
3090-0116

1. OFFEROR (Name, address, ZIP Code)		3. SOLICITATION NO.	
		4. ITEM OF SUPPLIES AND/OR SERVICES TO BE FURNISHED	
2. DIVISION(S) AND LOCATION(S) WHERE WORK IS TO BE PERFORMED		5. QUANTITY	6. TOTAL AMOUNT PROPOSED FOR ITEM \$

By submission of this form the offeror claims exemption from requirements for submitting certified cost or pricing data on the basis that the price offered is based on an established catalog or market price of a commercial item sold in substantial quantities to the general public or is a price set by law or regulation (see FAR 15.804-3). Complete Section I, II, or III below as applicable.

SECTION I - CATALOG PRICE (See instructions for items 7 thru 11 on reverse.)

7. CATALOG IDENTIFICATION AND DATE		8. SALES PERIOD COVERED	
		FROM	TO
9. CATEGORIES OF SALES	TOTAL UNITS SOLD*	10. REMARKS	
a. U.S. Government sales			
b. Sales at catalog price to general public			
c. Other sales to general public			

* If your accounting system does not provide precise information, insert your best estimate and explain the basis of it in item 10, REMARKS. Continue on a separate sheet, if necessary.

11. LIST THREE SALES OF THE ITEM OFFERED

SALES CATEGORY	DATE	NO. OF UNITS SOLD	PRICE/UNIT
a. <input type="checkbox"/> B <input type="checkbox"/> C			\$
b. <input type="checkbox"/> B <input type="checkbox"/> C			\$
c. <input type="checkbox"/> B <input type="checkbox"/> C			\$

SECTION II - MARKET PRICE (See Instructions for item 12 on reverse.)

12. SET FORTH THE SOURCE AND DATE OR PERIOD OF THE MARKET QUOTATION OR OTHER BASE FOR MARKET PRICE, THE BASE AMOUNT, AND APPLICABLE DISCOUNTS.

SECTION III - LAW OR REGULATION (See instructions for item 13 on reverse.)

13. IDENTIFY THE LAW OR REGULATION ESTABLISHING THE PRICE OFFERED

REPRESENTATION (See instructions for item 14 on reverse.)

The offeror represents that all statements made above and on attachments submitted are accurate and are submitted for the purpose of claiming exemption from requirements for submitting certified cost or pricing data. The offeror also represents that, except as stated in an attachment, a like claim for exemption involving the same or a substantially similar item has not been denied by a Government Contracting Officer within the last 2 years. Pending consideration of the proposal supported by this submission and, if this proposal or modification of it is accepted by the Government, until the expiration of 3 years from the date of final payment under a contract resulting from this proposal, the Contracting Officer or any other authorized employee of the United States Government is granted access to books, records, documents, and other supporting data that will permit verification of the claim.

14. TYPED NAME, TITLE, AND FIRM	15. SIGNATURE	16. DATE OF SUBMISSION

**INSTRUCTIONS TO OFFERORS SUBMITTING
CLAIM FOR EXEMPTION FROM SUBMISSION
OF CERTIFIED COST OR PRICING DATA**

Item 7. Attach a copy of the catalog, or the appropriate pages covering price and published discounts, or statement that the catalog is on file in the buying office to which this proposal is being made. Catalog price, is a price that is included in a catalog, price list, schedule, or other form that is regularly maintained by the manufacturer or vendor, is either published or otherwise available for inspection by customers, and states prices at which sales are currently, or were last, made to a significant number of buyers constituting the general public. To justify a catalog price exemption for the Government item, the catalog item must be identical or must be so similar in material and design that any price difference or its absence can be evaluated solely by price analysis (see FAR 15.805-2). In the latter case, a statement must be attached identifying the specific differences and explaining, by price analysis of the differences, how the proposed price is derived from the catalog price.

Item 8. This period should include the most recent regular monthly, quarterly, or other period for which sales data are reasonably available and should extend back only far enough to provide a total period representative of average sales. You may also attach sales data for prior representative period if for any reason recent sales are abnormal and the prior period is sufficiently recent (not more than 2 years preceding) to support the proposed price for the Government item. In the latter case, you must explain, by price analysis only, how the proposed price is derived from the catalog sales for the prior period.

Item 9. (a) Include in Category A all sales of the catalog item (a) directly to the U.S. Government and its instrumentalities and (b) for U.S. Government use (sales directly to U.S. Government prime contractors, or their subcontractors or suppliers at any tier, for use as an end item, or as part of an end item, by the U.S. Government).

(b) Include in Category B all sales of the catalog item made strictly at the catalog price, less only published discounts, to the general public (i.e., catalog price sales other than those (i) to affiliates of the offeror or (ii) included in Category A (Instruction 9 (a)).

(c) Include in Category C all sales to the general public that were not made strictly at the catalog price or that were made at special discounts or discount rates not published in the catalog.

Item 11. On line a. insert information on the lowest price at which Category B or C sales of the offered item was made during the period, regardless of quantity.

On lines b. and c. insert sales information in the following manner.

- a. Give the lowest price Category C sales of comparable quantities. If there were no sales of comparable quantities, then give
- b. The lowest price Category C sales of quantities most nearly the quantity being offered. If there were no sales of Category C, then give
- c. The lowest price Category B sales of comparable quantities. If there were no sales of comparable quantities, then give
- d. The lowest price Category B sales of quantities most nearly the quantity being offered.

Attach a complete explanation (i) if you, during the period covered, offered special discounts not included in the catalog, or (ii) if the price proposed is not the lowest price at which a sale was made to any customer during that period for like items and comparable quantities.

Item 12. Market price is a current price, established in the usual and ordinary course of trade between buyers and seller free to bargain, that can be substantiated from sources independent of the manufacturer or vendor. There must be a sufficient number of commercial buyers so that their purchases establish an ascertainable current market price for the item or service. The nature of this market should be described. To justify a market-price exemption, the item or service being purchased must be identical to the commercial item or service or must be so similar in material and design (for supplies) or in work and facilities (for services) that any price difference or its absence can be evaluated solely by price analysis (see FAR 15.805-2). In the latter case, a statement must be attached identifying the specific differences and explaining, by price analysis of the differences, how the proposed price is derived from the market price.

Item 13. Identify the law or regulation establishing the price offered. If the price is controlled under law by periodic rulings, reviews or similar actions of a governmental body, attach a copy of the controlling document, unless it was preciously submitted to the contracting office.

Item 14. Insert the name, title, and firm of the person authorized by the offeror to sign this form.

STANDARD FORM 1412 BACK (10-83)

3.2.4 Determine Exemption Based on Catalog Prices (Continued)

Questions to Consider When Exemption Decision Requires Investigation

When percentages fall in the "requires investigation" range, analyze the particular situation to determine if an exemption is justified.

Questions to consider include:

- Are past sales substantial in comparison with the proposed purchase action?

If the proposed purchase is large in comparison with all past sales, it would appear that past sales have been nominal and do not constitute a true market for the item.

- Are commercial sales of comparable dollar value being made at catalog price?

If comparable commercial sales are not being made at catalog price, it would appear that other customers are receiving discounts not being offered to the Government.

- What percentage of total sales was made to the general public at catalog price?

It is possible for the decision chart to indicate the "requires investigation" range with less than 20 percent (55 percent of 35 percent) of the sales being made to the general public at catalog price. The lower the percentage of sales made to the general public at catalog price, the greater your concern should be that the price is not a genuine catalog price.

- Are other bases of price analysis available to support the determination of price reasonableness?

In granting the exemption, you are indicating that the pricing decision can be made using price analysis alone. The more price analysis tools you have at your disposal, the more confident you should be that price analysis can do the job.

- Is there an unusual volume of recent Government purchases of the item?

If recent purchases are the reason that a normally exempt item no longer satisfies the criteria for exemption, consider granting an exemption nonetheless.

3.2.5 Determine Exemption Based on Market Prices

General Criteria An offeror's proposal should be exempt from the requirement for submission of certified cost or pricing data, based on market pricing, if you can answer the following three questions affirmatively:

- Are the prices, or are the prices based on, established market prices?
- Are the items commercial items?
- Are the items sold in substantial quantities to the general public?

Definition
Established
Market Prices

Established market prices are current prices that meet both of the following tests:

- Prices are established in the course of ordinary and usual trade between multiple buyers and sellers, who are free to bargain.
- Prices can be substantiated by data from sources independent of the producer or vendor.

Definition

Commercial Items, Substantial Quantities, General Public are the same as defined under catalog priced items.

Pricing Based on
Established
Market Prices

A price may be considered to be "based on" an established market price only if the item being purchased is sufficiently similar to the market priced commercial item to ensure that any difference in prices can be identified and justified without resort to cost analysis.

Pricing
Substantially
Similar Items

If an item is similar to an established market priced commercial item, but the price proposed cannot be explained through price analysis alone, you may limit any requirement for cost or pricing data to those data that pertain to the difference between the items. When the total contract price related to differences between the market priced item and the proposed item is \$100,000¹ or more, you must require submission of certified cost or pricing data to identify and justify that difference.

(Continued on next page)

¹ \$500,000 for DoD, NASA, and the Coast Guard, for contracts awarded after December 5, 1990.

3.2.5 Determine Exemption Based on Market Prices (Continued)

Verification
Using the
Standard Form
1412

The market price exemption is claimed using Section II of the SF 1412. Once the SF 1412 is obtained, analyze the data carefully before granting an exemption to the submission of a Certificate of Current Cost or Pricing Data.

Review
Information
Submitted on
SF 1412

Review the instructions to offerors on the back of the SF 1412 before beginning your analysis. If the required information has not been submitted, the claim for an exemption should be rejected.

- Did the offeror state the market price?
The market price is essential because it will serve as a basis for determining price reasonableness if the exemption is granted.
- Did the offeror explain the nature of the market for the item or service?
There must be a sufficient number of commercial buyers and sellers so that the purchases establish an ascertainable current market price for the item or service.
- Did the offeror provide the source of the market quotation or other basis used to determine market price?
The source must be independent of the producer or vendor. Commodity market summaries are a common source of independent market information.
- Did the offeror provide the date or period of the market quotation or other basis used to determine market price?
Markets, by their nature, rise and fall. To verify the market information submitted by the offeror, you will need to know the time period relating to the market information.
- If the proposed price is different from the market price, did the offeror identify how the proposed price was derived from the market price?
If the proposed price is not identical to the market price, you must understand the differences to determine if the proposed price is reasonable.

(Continued on next page)

3.2.5 Determine Exemption Based on Market Prices (Continued)

Analyze
Information
Submitted
on SF 1412

When determining whether to grant the exemption, you must be able to answer the following questions affirmatively:

- Was the stated market price established in the usual and ordinary course of trade between buyers and sellers free to bargain?
 - Are there a sufficient number of commercial buyers so that their purchases establish an ascertainable current market price for the item or service?
 - Was the stated market price substantiated by sources independent of the producer or vendor?
 - If the proposed price is different than the market price, did the offeror adequately describe how the proposed price was derived from the market price?
 - Are there a sufficient number of sellers of the same item so that buyers choose the source on the basis of price, not product differences?
-

3.2.6 Determine Exemptions For Regulated Prices

General Criteria

You can exempt an offeror's proposal from the requirement for submission of certified cost or pricing data, on the basis of pricing by law or regulation, if you can answer either of the following questions affirmatively:

- Is the proposed price set by pronouncements in the form of periodic rulings, reviews, or similar actions of a governmental body?
- Is the proposed price embodied in the law? (U.S. Federal, State, or Local)

Verification Using the Standard Form 1412

The exemption is normally claimed using Section III of the SF 1412. Once the SF 1412 is obtained, analyze the data presented carefully before granting an exemption to the submission of a Certificate of Current Cost or Pricing Data.

Review Information Submitted on SF 1412

Review the instructions to offerors on the back of the form before beginning your analysis. If the required information has not been submitted, the claim for an exemption should be rejected.

- Did the offeror identify the law or regulation establishing the price offered?
Identification of the law is essential to any review of its requirements and applicability to the item or service being purchased.
- If the price is controlled under law by periodic rulings, reviews, or similar actions of the Government, has the offeror submitted a copy of the controlling documents?
These documents will serve as a record of the regulated pricing requirements.

Analyze Information Submitted on SF 1412s

In determining whether to grant the exemption, you must be able to answer one of two questions, identified in the section on General Criteria above, affirmatively.

If there is any question about the applicability of the stated pricing set by law or regulation, consult your local legal counsel for assistance.

Purchase Widgets (Cont.)

After reviewing prior purchase history, the current market, and the responses to your notice in the Commerce Business Daily, you estimate that about six independent sources will probably compete for the widget contract. Based on that anticipated competition, you determine that the procurement is exempt from the requirement to submit Certified Current Cost or Pricing Data. You are tempted to request the data "just in case you only get one offer," but you change your mind because the requirement could substantially limit competition.

Now that you have determined that Certified Current Cost or Pricing Data are not required, you must determine whether other data are necessary.

SECTION C

STEP 3

3.3 IDENTIFY ADDITIONAL DATA NEEDED FROM THE OFFEROR TO SUPPORT AN OFFERED PRICE

Overview

Introduction Normally, if the offeror meets the requirements for an exemption, no Certified Cost or Pricing Data will be required. You will make the award on the basis of price analysis.

Obtain Additional Data from the Offeror

Granting an exemption does not mean that the proposed price is fair and reasonable. Even if an offeror qualifies for an exemption, you must still determine whether the price is fair and reasonable and conduct price negotiations. To do this, you may need additional data from the offeror to support an offered price.

When entering into noncompetitive negotiations on the basis of catalog prices or market prices, you may need additional price related data from the offeror. Obtaining such data is described in Section 3.3.1.

Likewise, when contracting under the dollar threshold for mandatory certified data, you may need uncertified cost data under the circumstances described in Section 3.1.2. Obtaining such data is described in Section 3.3.2.

In this section

This section covers the specific steps you will take to identify additional data needed from the offeror to support an offered price when certified cost or pricing data are not required.

TOPIC	SEE PAGE
3.3.1 Identify Other Necessary Price Related Data	3-38
3.3.2 Identify Necessary Uncertified Cost Data	3-40

3.3.1 Identify Other Necessary Price-Related Data

Introduction

When buying commercial products or services, you may need data from the offeror on the following:

FAR
15.804-6(a)(2)

- Marketing system.
- Services normally provided.
- Normal quantity per order.
- Annual volume of sales to largest customers.
- Major classes of customers; differences between classes.
- Details on sales at other than catalog price.
- Data regarding past contracts for similar work.

Such data are primarily necessary when:

- The offeror has submitted an SF1412 to claim an exemption from the requirement for certified data based on catalog or market prices.
 - You are negotiating with a sole source to acquire a commercial product or service for a price below the mandatory threshold for certified cost or pricing data.
-

Marketing System

Different firms market products in different ways. Some sell direct to the ultimate customer; others deal with the ultimate customer through a complex chain of jobbers, brokers, sales agents, or distributors. The marketing system affects the pricing structure. A firm selling through intermediaries typically has relatively lower prices than a firm selling a similar product directly to the ultimate customer. Intermediaries provide services to both the producer and the customer, and they charge for providing those services.

If the Government requires less marketing system support than a commercial customer making comparable purchases, the Government should pay a lower price.

Services Normally Provided

Different firms and industries also provide different levels of support services for their products, including engineering and financing. If the Government requires those services, it is reasonable to pay the same price as the commercial customer. If the Government does not require those services, the Government's price should be lower.

(Continued on next page)

3.3.1 Identify Other Necessary Price-Related Data (Continued)

Normal Quantity per Order

In purchasing, we normally assume that larger order quantities will reduce the price per unit. Therefore it is important to determine how the size of Government orders compares with the size of commercial orders. If Government orders are larger than those of commercial buyers, a Government buyer should reasonably expect to pay a lower price.

Annual Volume of Sales to Largest Customers

Commercial firms often negotiate special discounts with major customers, over and above normal order quantity discounts, based on total volume. You should try to benefit from similar discounts when they apply. In comparing total volume of purchases, you should consider known Federal Government purchases from all sources as a group.

Major Classes of Customers and Differences

Not all customers are the same. Customer needs vary and it is likely that the services provided by the offeror will vary with customer needs. As services vary, so will price.

Information on different classes of customers such as total sales, services provided, and discounts can provide useful information. You will be able to determine the price that customers with requirements similar to those of the Government pay and why that price differs from the prices paid by other customers.

Details on Sales at Other Than Catalog Price

Specific information on the sales made at other than catalog price will help you determine if the Government should qualify for similar treatment. For example, if a commercial customer receives a discount because of the number of units purchased, the Government should receive a similar discount for a similar purchase volume. If the discount quantity exceeds the size of the Government purchase, you may be able to coordinate with the requesting organizations to adjust purchase quantities to meet volume requirements. Similar adjustments may be possible to obtain other available discounts.

Past Contracts for Similar Work

Historical prices are common base for price analysis. Normally, you will obtain the pricing data from Government sources, but there will be situations where you are dealing with a new firm or a familiar firm offering a new item. If the offeror can provide you with information on other Government sales, you can verify the information and use it in making your pricing decision.

3.3.2 Identify Necessary Uncertified Cost Data

Introduction

FAR 15.804-6(a)

If, per Section 3.1.2, you have decided to require the offeror to submit an "uncertified" cost proposal to support a contract action under \$100,000¹, you will have to further decide the extent of cost or pricing data to require. You may decide to require the submission of a complete proposal covering all elements of cost. Or you may elect to require only partial or limited data on costs to determine a reasonable price. For example, cost data might be necessary to support an analysis of material costs, but not for labor and overhead costs. Specify the scope and extent of data requirements in the RFP.²

Identify
Necessary
Uncertified Cost
Data

Do not request uncertified data routinely. Limit requests to those situations in which such data are necessary to assure a fair and reasonable price or verify that both parties understand all requirements of the contract that affect the cost of doing the work. An example would be a situation where you need to make sure that all specification requirements have been properly considered in developing the proposed price. In this situation, you should identify and request data necessary to ensure consideration of specification requirements.

Requirements should be carefully tailored to ensure that all necessary data are provided but not unneeded data.

¹ \$500,000 for DoD, NASA, and the Coast Guard, for contracts awarded after December 5, 1990.

² FAC 90-10.

Purchase Widgets (Cont.)

Following the steps outlined in this chapter, you have determined that Certified Current Cost or Pricing Data are generally required for purchases in excess of \$100,000¹

However, you have also determined that your widget acquisition is exempt from the general requirement because you expect competition from six independent sources.

Finally, you determine that other price-related data are not required because you have a known requirement and a good purchase history, and you expect strong price competition.

¹ \$500,000 for DoD, NASA, and the Coast Guard, for contracts awarded after December 5, 1990.

Identify Additional Data Needed from the Offeror to Support an Offered Price

CHAPTER 4

SELECT PRICE-RELATED FACTORS FOR AWARD

Learning Objectives

At the End of
This Chapter

At the end of this chapter, you will be able to:

Classroom Learning Objective 4/1

Determine the most advantageous award strategy:

- Single award of all line items to one contractor
- Separate, single awards for different line items
- Progressive awards (when most firms in the market are capable of individually providing only a part of the total quantity required per the delivery schedule)
- Multiple awards (if, in commercial markets where competition is based on tradeoffs between features and price, there is no one bundle of features that will satisfy all users of an indefinite quantity contract)
- Partial set asides (for small businesses)

Classroom Learning Objective 4/2

Identify price-related factors that may be applied, and when each one is used in determining an evaluated price.

Classroom Learning Objective 4/3

Identify circumstances that would warrant the application of specific price-related factors and identify general requirements for evaluation formula development.

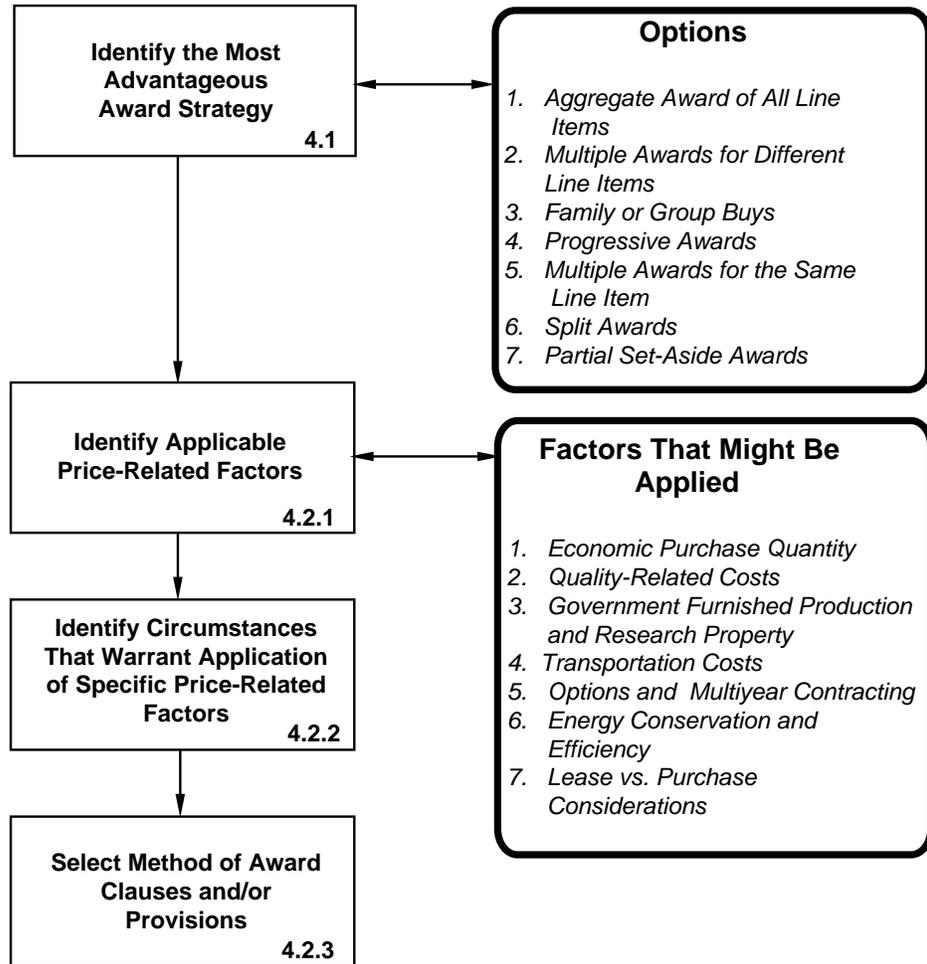
Classroom Learning Objective 4/4

Select appropriate method of award clauses and/or provisions and applicable price-related factors to make more than one award and/or issue multiple contracts under the solicitation.

Procedural Steps

Procedural Steps

The following figure shows the sequence of events or steps that you should follow in selecting price-related factors for award.



Chapter Overview

Introduction

Price competition is considered to exist when award is made to the offeror with the lowest evaluated price. This does not necessarily mean that you must make the award to the otherwise acceptable offeror with the lowest price. Selection of award criteria can significantly affect the Government's ability to attract adequate price competition and to obtain the needed item or service at a fair and reasonable price.

Fair and Reasonable Price

A fair and reasonable price is:

- Fair to the Buyer
 - Fair to the Seller
 - Reasonable Under Market Conditions
 - Reasonable Considering the Total Cost of the Acquisition
-

Applicable Factors in Offer Evaluation

FAR 14.201-8 identifies several factors that you may apply in evaluation of offers for award and requires that these be included in the solicitation whenever applicable:

FAR 14.201-8

- Foreseeable costs or delays to the Government resulting from differences in inspection, locations of supplies, and/or transportation. If bids are on an f.o.b. origin basis, transportation cost to the designated points shall be considered in determining the lowest cost to the Government.

FAR 14.404

- Changes made, or requested by the bidder, in any of the provisions of the invitation for bids, if the change does not constitute a ground for rejection under FAR 14.404.
 - Advantages or disadvantages to the Government that might result from making more than one award. The contracting officer must assume, for the purpose of making multiple awards, that \$500 would be the administrative cost to the Government for issuing and administering each contract awarded under a solicitation. Individual awards must be for the items or combinations of items that result in the lowest aggregate cost to the Government, including the assumed administrative costs.
 - Federal, State, and local taxes.
 - Origin of supplies, and, if foreign, the application of the Buy American Act or any other prohibition on foreign purchases.
-

(Continued on next page)

Chapter Overview (Continued)

In This Chapter

This chapter covers two price-related considerations of particular importance in attracting competition and obtaining a fair and reasonable price in selecting contract award criteria. These are selecting possible award combinations and selecting price-related factors for award. The specific steps you will follow are shown below:

SECTION	DESCRIPTION	SEE PAGE
A	4.1 Step 1: Select Possible Award Combinations	4-7
	4.1.1 Aggregate Award of All Line Items to One Contractor	4-9
	4.1.2 Multiple Awards for Different Line Items	4-10
	4.1.3 Family or Group Buys	4-11
	4.1.4 Progressive Awards for Portions of Total Line Item Requirement	4-12
	4.1.5 Multiple Awards for the Same Line Item	4-13
	4.1.6 Split Awards	4-14
	4.1.7 Partial Set-Aside Awards	4-15
B	4.2 Step 2: Select Price-Related Factors for Award	4-17
	4.2.1 Identify Applicable Price-Related Factors	4-18
	4.2.2 Identify Formula(s) for Evaluation	4-48
	4.2.3 Select Method of Award Clauses or Provisions	4-49

Purchase Widgets (Cont.)

As you continue to prepare the solicitation for your widget purchase, you must determine what factors you should consider in making the award decision. Your supervisor suggests that you look at the last solicitation to determine what factors have been considered in the past.

When you look at the last solicitation, you note that the award criteria state that "an aggregate award will be made to the low, responsible offeror, whose offer is most advantageous to the Government." Most of the solicitations that you have seen use the same wording, so you think that the criteria are probably acceptable, but you wonder if there are other criteria that might be used to obtain a better business deal for the Government.

The two price-related decisions that seem most important in the award decision are: Possible award combinations and selection of price-related factors to be used in offer evaluation.

SECTION A

STEP 1:

4.1 SELECT POSSIBLE AWARD COMBINATIONS

Overview

Introduction

When soliciting bids/offers on only one unit of a single product, only one firm can receive a contract award to provide that product unit. However, as the number of different items and the number of units of each item increase, the number of award possibilities also increases. Theoretically, the award possibilities could become almost infinite.

Identify Most Advantageous Award Strategy

You must always clearly define the award criteria that you will use to determine possible award combinations for a particular solicitation. There are a number of such combinations that can be selected as the basis for contract award.

(Continued on next page)

Overview (Continued)

In This Section

This section covers descriptions and pricing considerations for the following types of awards:

TOPIC	SEE PAGE
4.1.1 Aggregate Awards of All Line Items to One Contractor	4-9
4.1.2 Multiple Awards for Different Line Items	4-10
4.1.3 Family or Group Buys	4-11
4.1.4 Progressive Awards for Portions of Total Line Item Requirement	4-12
4.1.5 Multiple Awards for the Same Line Item	4-13
4.1.6 Split Awards	4-14
4.1.7 Partial Set-Asides	4-15

4.1.1 Aggregate Award for All Line Items to One Contractor

Aggregate Awards

The table below presents descriptions and pricing considerations for making aggregate awards.

AGGREGATE AWARDS	
DESCRIPTION	USE WHEN...
Award to the single responsive, responsible offeror whose offer is most advantageous to the Government.	<p>Award on an "all or none" basis would probably result in a total price that is lower than the sum of low offers from a line-item by line-item competition. This is especially true when firms regularly sell the deliverables as a integrated package to realize economies of scale that are not possible when selling each component independently.</p> <p>For example, many firms offer computer systems that are cheaper than buying the separate components (e.g. disk drives, monitors, video cards, etc.) one by one.</p>
<p><i>Example of a Method of Award Provision:</i></p> <p>Award will be made in the aggregate for all items. The low aggregate offeror will be determined by multiplying the unit price submitted on each item by the quantity specified, and adding the resultant extensions. In order to qualify for an award, prices must be submitted on all items.</p>	

4.1.2 Multiple Awards for Different Line Items

Multiple Awards for Different Line Items

The table below presents descriptions and pricing considerations for making multiple awards for different line items.

FAR 52.214-22
FAR 52.215-34

MULTIPLE AWARDS (Line Item by Line Item)	
DESCRIPTION	USE WHEN.
<p>Base award(s) on the line items or groups of line items that provide the lowest aggregate cost to the Government, including the assumed administrative costs for awarding and administering each contract.</p>	<p>Awarding line-item by line-item is likely to result in a lower total price than awarding on an aggregate "all or none" basis. This would be especially true if prospective offerors are likely to perceive no significant economies of scale (or diseconomies of scale) from an aggregate award.</p> <p>For example, some firms sell peripherals for microcomputers at much lower prices than are typically offered by microcomputer manufacturers. However, they could not compete for the peripherals if the RFP requires submission of a single, aggregate price for all line items (including the peripherals) that comprise a microcomputer system .</p>
<p><i>Example 1 of a Method of Award Provision:</i> Award will be made on an item-by-item basis.</p>	
<p><i>Example 2 of a Method of Award Provision:</i></p> <p>(a) The Government intends to make awards on an item-by-item basis. However, if an "all or none" or similar type offer is received, offers on the items to which the "all or none" offer applies will be evaluated and award made as prescribed in paragraph (b).</p> <p>(b) An offer submitted on an "all or none" or similar basis will be evaluated as follows: The lowest acceptable offer exclusive of the "all or none" offer will be selected with respect to each item (or group of items when the solicitation provides for aggregate awards) and the total cost of all items thus determined shall be compared with the total of the lowest acceptable "all or none" offer. Award will be made to result in the lowest total cost to the Government.</p>	

4.1.3 Family or Group Buys

Family or Group Buys

The table below presents descriptions and pricing considerations for family or group buys.

FAR 52.214-22
FAR 52.215-34

FAMILY OR GROUP BUYS	
DESCRIPTION	USE WHEN...
Award for identified families, or groups, of line items that provide the lowest aggregate cost to the Government, including the assumed administrative costs of awarding each contract.	<p>Offerors are likely to submit a total price for a group of line items that would be lower than the sum of their offers on the individual items. This would be especially true if offerors are likely to perceive significant economies of scale from being awarded all line items in that group as a package.</p> <p>For example, firms that manufacture ribbons for typewriters also tend to manufacture ribbons for dot matrix printers. In this case, line items for ribbons might make a good "family."</p>
<p><i>Example of a Method of Award Provision:</i></p> <p>Award will be made in the aggregate by group. The low aggregate offeror will be determined by multiplying the unit price submitted on each item by the estimated quantity specified, and adding the resultant extensions. In order to qualify for an award on a group, prices must be submitted on each item within the group.</p>	

4.1.4 Progressive Awards for Portions of Total Line Item Requirement

Progressive Awards

FAR 52.214-22
FAR 52.215-34

The table below presents descriptions and pricing considerations for making progressive awards.

PROGRESSIVE AWARDS (Each Line Item)	
DESCRIPTION	USE WHEN
<p>If the lowest evaluated unit price for a line item is less than the total Government requirement, award up to the quantity offered. Follow the same procedure with the next lowest evaluated unit price and continue until the entire line item requirement is awarded.</p>	<p>Some of the potential competitors do not have the capability of supplying <u>all</u> of the required quantity, but might be in a position to offer the lowest price for some of the needed units.</p> <p>For example, some firms specialize in reconditioning laser printer cartridges and offer those cartridges at a fraction of the price of new units. If such firms do not have enough reconditioned cartridges to fill the entire order, progressive awards would allow them to compete for the quantities that they can supply—with OEMs in effect competing for the balance of the requirement.</p>
<p><i>Example of a Method of Award Provision:</i></p> <p>a) <u>Primary Awards</u>. Award will be made on an item-by-item basis to the lowest responsive offerors up to their stated monthly quantity allocations. Awards to any offeror will not be made for quantities in excess of the firm's stated monthly quantity allocation.</p> <p>b) <u>Progressive Awards</u>. If the low responsive offeror offers a monthly quantity allocation which, when multiplied by the number of months representing the contract period, totals less than the Government's estimated annual requirements, the Government may make progressive awards to the extent necessary to meet its estimated annual requirements. In such cases, awards will be made to the low responsive offeror up to that offeror's stated monthly quantity allocation, and then progressively to other offerors to the extent necessary to cover all Government requirements. Within the limits prescribed by the offeror, the Government will apply offeror's monthly quantity allocation to any items offered, as the Government's interests require.</p> <p>c) <u>Ordering Procedures</u>. If progressive awards are made, orders will be placed first with the contractor offering the lowest price on each item normally up to the contractor's monthly quantity allocation and then in the same manner, successively to other contractors. However, to avoid the placement of unduly small orders or the splitting of a single requirement between two contractors, the Government reserves the right to place orders with back-up contractors whenever the orders placed with lower priced contractors equal or exceeds 95 percent of their monthly quantity allocation for the item or group of items being ordered. In no case will orders be placed with any contractor in excess of his monthly quantity allocation.</p>	

4.1.5 Multiple Awards for the Same Line Item

Multiple Awards
for the Same
Line Item

The table below presents descriptions and pricing considerations for making multiple awards for the same line item.

MULTIPLE AWARDS (Estimated Requirements for Individual Line Items)	
DESCRIPTION	USE WHEN
<p>Make multiple awards for the same indefinite requirement in situations where multiple firms are capable of delivering similar, but not identical, products to meet the needs of the Government, and selectivity is needed on the part of the ordering offices. Ordering offices then have the choice of selecting the product and firm that best meet their needs.</p>	<p>Multiple products are necessary to meet the needs of the Government and your agency has authority to establish a "Multiple Award Schedule" for the item or service. Only the General Services Administration (GSA) and agencies with authority delegated from the GSA are authorized to establish "Multiple Award Schedules."</p> <p>Examples include the Federal Supply Schedules (FSS) and the IRMS non-mandatory schedules for Federal information resources.</p>
<p><i>Federal Supply Schedule (FSS) Example of a Method of Award Provision:</i></p> <p>The Government may make multiple awards for the articles or services listed herein to those responsible offerors whose offers, conforming to the request for proposal, will be most advantageous to the Government, taking into consideration availability of production and distribution facilities, price, quality, facility of delivery, technical advice or service in connection with products involved, and other pertinent factors. Offerors are advised that agencies which contemplate placing orders for items of the type contained in contracts resulting from this request for proposal will be instructed, except where precluded by administrative expense or urgency considerations, to consider equally those contract sources and other sources to assure that purchases of such items are made to the best advantage of the Government, taking into consideration price, availability, delivery time and costs, and other pertinent factors.</p>	
<p><i>Other Agency Example of a Method of Award Provision:</i></p> <p>The Government intends to make multiple contract awards resultant from this solicitation to those companies it determines have submitted proposals which offer the best value to the Government, considering primarily technical scores and secondarily, offered prices. The Government reserves the right to award contracts to other than the lowest priced offers if, in its judgment, the technical superiority outweighs the cost difference. The Government reserves the right to award contracts to other than the highest ranked technical proposals if, in its judgment, the potential cost savings offset a minor difference in technical scores. If offers are determined to be technically equal, cost will be the determining factor for award.</p>	

4.1.6 Split Awards

Split Awards

The table below presents descriptions and pricing considerations for making split awards.

SPLIT AWARDS (Estimated Requirements for Individual Line Items)	
DESCRIPTION	USE WHEN...
<p>Award of requirements for an individual line item may be split between two or more sources. Every possible effort should be made to establish economic production quantities.</p>	<p>One of the following situations exist:</p> <ol style="list-style-type: none"> 1. No potential offeror could supply all of the Government's requirements out of its current capacity. Absent split awards, the Government would probably pay a higher per unit price to cover the awardee's costs of meeting requirements in excess of its current capacity. 2. Dual sourcing would permit price competition for a product that would otherwise be available only from one source. The split may be on a percentage share basis, with the most favorable offer receiving the largest percentage of the requirement. 3. Multiple sourcing is necessary to maintain competition in producing unique items for the Government, under the authority of FAR 6.202 to exclude one of the sources from being awarded the total requirement. 4. Partial set-asides as described in detail on page 4-12.
<p><i>Examples of a Method of Award Provisions for Large Quantities</i></p> <p>The total requirement will be awarded in economic order lots of 50,000 units each. Bidders must indicate the number of lots the firm is willing to accept at the bid price.</p>	
<p><i>Example of Method of Award Provision for Unique Item:</i></p> <p>The Government intends to make split awards from this solicitation. Sixty percent of the total quantity will be awarded to the offeror that the Government determines to have submitted the proposal that offers the best value to the Government, considering primarily technical scores and secondarily, offered prices. Forty percent will be awarded to the remaining competitor provided that the technical evaluation determines that the technical proposal is acceptable and the offered prices are determined to be fair and reasonable.</p>	

4.1.7 Partial Set-Aside Awards

Partial Set-Aside Awards

FAR 52.219-7

The table below presents descriptions and pricing considerations for making partial set-aside awards.

PARTIAL SET-ASIDE AWARDS	
DESCRIPTION	USE WHEN...
<p>A portion of a requirement must be set-aside for small business when all of the following are true:</p> <ul style="list-style-type: none"> • A total set-aside is not appropriate. • The requirement is severable into two or more economic purchase lots. • One or more small businesses have the capability to satisfy the set-aside requirement. • The acquisition is not made under small purchase procedures. 	<p>Do not use set-asides in situations where it is not reasonable to expect that the set-aside will be awarded at a fair and reasonable price.</p> <p>If a small business is awarded the non-set-aside portion of the requirement, do not attempt to negotiate a lower price with the firm for the set-aside portion. However, accept voluntary reductions.</p>
<p><i>Method of Award Provision Requirements:</i></p> <p>The set-aside portion of the requirements must be specifically identified. Any acceptable method of award may be used to award the set-aside portion, including aggregate, line item by line item, or family buys. Solicitations must include FAR 52.219-7, Notice of Partial Small Business Set-Aside.</p>	

Purchase Widgets (Cont.)

Since your office does not have any major requirements for related items, you have already decided to limit your solicitation to your widget requirement.

All the purchase history and other market-related data that you have been able to collect so far lead you to estimate that you will have six independent sources competing for the contract. Based on the close competition for past purchases, it appears that all potential offerors will be able to furnish all of the units required by the Government.

As a result, you decide to make an aggregate award to a single offeror.

However, you still need to determine what price-related factors you will consider in making the award decision.

SECTION B

STEP 2:

4.2 SELECT PRICE-RELATED FACTORS FOR AWARD

Overview

Introduction

In the last section, you learned about the use of various methods of award to encourage competition and the advantages and disadvantages to the Government that would result from using different methods.

In this Section

In this section, you will learn about specific price-related factors that can be used to adjust offered prices to consider purchase-related costs to the Government.

TOPIC		SEE PAGE
4.2.1	Identify Factors to be Applied	4-18
4.2.1.1	Application of the Buy American Act	4-19
4.2.1.2	Quality-Related Costs	4-22
4.2.1.3	Government Furnished Production and Research Property	4-29
4.2.1.4	Transportation Costs	4-32
4.2.1.5	Options and Multiyear Contracting	4-36
4.2.1.6	Life-Cycle Costs	4-40
4.2.1.7	Energy Conservation and Efficiency	4-44
4.2.1.8	Lease vs. Purchase Considerations	4-46
4.2.2	Identify Formula(s) for Evaluation	4-48
4.2.3	Select Method of Award Clauses or Provisions	4-49

4.2.1 Identify Applicable Price-Related Factors

Introduction

You must identify the price-related factors to be considered in a particular purchase in the award criteria defined in the solicitation.

Identify Price-Related Factors

Assure that contract award criteria consider all price-related factors that will have a significant, quantifiable effect on the total cost of the acquisition. The following list identifies several price-related factors that may be applicable to your contracting situation:

- Application of the Buy American Act.
- Quality-Related Costs
- Government Furnished Production and Research Property
- Transportation Costs
- Options and Multiyear Contracting
- Life-Cycle Costs
- Energy Conservation and Efficiency Consideration
- Lease vs. Purchase Considerations

The list is not meant to be all inclusive. You may identify other price-related factors that should be considered.

4.2.1.1 Application of the Buy American Act

The "Buy American Act" Requirement

FAR 25.102

The Buy American Act requires that only domestic end products be acquired for public use, except articles, materials, and supplies—

- (1) For use outside the United States;
- (2) For which the cost would be unreasonable, as determined in accordance with 25.105;
- (3) For which the agency head determines that domestic preference would be inconsistent with the public interest;
- (4) That are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities, of a satisfactory quality (see 25.108); or
- (5) Purchased specifically for commissary resale.

Implementation

FAR 52.225-3(b)

To implement this requirement, you must insert the clause at FAR 52.225-3, "Buy American Act—Supplies" in solicitations for the acquisition of supplies, or for services involving the furnishing of supplies, for use within the United States, except for acquisitions made under the Trade Agreements Act of 1979, as specified in Subpart 25.4.. This clause requires the contractor to deliver "only domestic end products, except those—

- (1) For use outside the United States;
- (2) That the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality;
- (3) For which the agency determines that domestic preference would be inconsistent with the public interest; or
- (4) For which the agency determines the cost to be unreasonable (see section 25.105 of the Federal Acquisition Regulation).

(The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954, as amended, and Subpart 25.1 of the Federal Acquisition Regulation.)"

Note that the fourth exception allows you to award to a firm offering a foreign product if the cost of domestic end items is considered unreasonable under section 25.105 of the FAR. That FAR section establishes criteria for determining the low evaluated offer when both domestic and foreign end items have been offered in response to your solicitation.

(Continued on next page)

4.2.1.1 Application of the Buy American Act (Continued)

Determining the Low Offer Under Section 25.105 of the FAR

FAR 25.105

25.105 Evaluating offers.

(a) Unless the agency head determines otherwise, the offered price of a domestic end product is unreasonable when the lowest acceptable domestic offer exceeds the lowest acceptable foreign offer (see 25.101), inclusive of duty, by—

- (1) More than 6 percent, if the domestic offer is from a large business that is not a labor surplus area concern; or
- (2) More than 12 percent, if the domestic offer is from a small business concern or any labor surplus area concern.

(b) The evaluation in paragraph (a) of this section shall be applied on an item-by-item basis or to any group of items on which award may be made as specifically provided by the solicitation.

Distinguishing "Domestic" From "Foreign" End Items

FAR 52.225-1

How can you tell whether an offered product is "domestic" or "foreign" for the purposes of applying these criteria in FAR 25.105? By incorporating the solicitation provision at FAR 52.225-1, which obliges offerors to identify any "foreign" product being offered.

BUY AMERICAN CERTIFICATE (DEC 1989)

The offeror certifies that each end product, except those listed below, is a domestic end product (as defined in the clause entitled "Buy American Act—Supplies"), and that components of unknown origin are considered to have been mined, produced, or manufactured outside the United States.

<i>Excluded End Products</i>	<i>Country of Origin</i>
_____	_____
_____	_____
_____	_____
_____	_____

(List as necessary)

Offerors may obtain from the contracting officer lists of articles, materials, and supplies excepted from the Buy American Act.

(End of provision)

This solicitation provision, coupled with the clause at FAR 52.225-1, puts offerors on notice that award may be made to a firm offering a domestic end item even though the price of that item is higher than that of a firm offering a foreign product (by as much as 6% higher, if the domestic offer is from a large business that is not a labor surplus concern, or as much as 12% higher, if the domestic offer is from a small business concern or any labor surplus area concern).

(Continued on next page)

4.2.1.1 Application of the Buy American Act (Continued)

Caveats

-
1. The criteria in section 25.105 of the FAR are guidelines only. Many Federal departments and agencies (particularly the Department of Defense) have different criteria for determining when the cost of domestic end items should be considered unreasonable. Check your agency's FAR Supplement before relying on the guidance in FAR 2.1.
 2. Note that the clause at 52.225-3, “Buy American Act—Supplies”, does not apply to acquisitions made under the Trade Agreements Act of 1979. See FAR subpart 25.4 for guidance on applying the provisions of that Act.
 3. FAR 25.108 contains a long list of articles, materials, and supplies that various agencies have determined are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality. That list is furnished for information only. Again, check your agency's FAR Supplement for guidance on this matter.
 4. FAR section 25.1 contains still other exceptions and qualifications to the general requirements of FAR 25.102(a).
-

4.2.1.2 Quality-Related Costs

Introduction

FAR 9.103

In accordance with FAR 9.103, a contracting officer must award a contract to a firm only after making an affirmative determination of contractor responsibility.

When making a determination of responsibility, consider the contractor's performance record. To be responsible, an offeror must have a SATISFACTORY record of performance. The term SATISFACTORY indicates that the offeror's performance falls within a RANGE OF ACCEPTABLE PERFORMANCE. Some offerors in that range may be OUTSTANDING; others may be MINIMALLY ACCEPTABLE.

If contract award decision criteria do not reward outstanding performance, contractors have no monetary incentive to achieve more than a MINIMALLY ACCEPTABLE level of performance. Subjective analysis of past performance has always been a basis for analysis of technical capabilities in negotiated contract source selections. Unfortunately, detailed analysis of past performance was SUBJECTIVE and often based on LIMITED DATA.

Quality-Related Cost

Some acquisition managers have developed QUANTITATIVE scales to differentiate between MINIMALLY ACCEPTABLE and OUTSTANDING performance. These managers use the scales to rate contractor performance. The ratings are then used as a price-related factor for subsequent acquisitions, in theory representing the expected dollar value of the quality-related costs that the Government would incur if it buys the deliverable from that firm.

Quality related costs include both conformance and nonconformance costs.

Definition

Conformance Costs—are incurred when ensuring that certain things are done right the first time.

Example

Product inspection costs are one kind of conformance cost. Inspections assure that items meet contract quality requirements and that deficiencies will not affect operations.

(Continued on next page)

4.2.1.2 Quality-Related Costs (Continued)

Definition

Nonconformance Costs—are incurred because things are not done right the first time.

Costs related to defective products are nonconformance costs. These costs include the management cost of deciding what action to take with a defective product: return it to the supplier, use if defects are only minor, repair it, or scrap it; the cost of the actual corrective action such as repairs; and any costs related to delays that were caused by the deficiency.

While analysis of quality-related costs can consider both conformance and nonconformance costs, most analyses today focus on nonconformance costs.

Measure Performance Quality

Consideration of quality-related costs in the award decision requires some means of measuring contractor performance quality. Timely delivery and quality defects at the time of delivery are the most commonly considered conformance costs because they are the easiest to identify and track. Quality failures after an item is in the system are much harder to correctly identify as contractor failures and to track to a particular contract or delivery.

It is difficult to measure the cost of timely delivery and the cost of defects at the time of delivery. Delivery too early will needlessly increase inventory investment and holding cost. Delivery too late may stop operations entirely. What is the cost of an inoperable aircraft during a war? What is the cost of replacing an inoperable freight management system with slower manual labor?

If a defective item is rejected, the effect is the same as if the item had not been delivered. If it is accepted and brought up to the required level of quality or used as is, different costs will be incurred.

Three General Approaches

In response to these complexities, many different approaches have been developed for considering the cost of quality in the award decision. Three general approaches include:

- Blue Ribbon Contractor Programs
 - Vendor Rating Systems
 - Supplier Performance Indexes
-

Blue Ribbon Contractor Programs

Introduction	Blue Ribbon Contractor (BRC) programs quantitatively consider the cost of quality in the contract award decision. Placement on a Blue Ribbon Contractor List (BRCL) is typically determined independently for each Federal Stock Class (FSC).
BRCL Requirements	Although the requirements are not the same in all programs, there are minimum requirements for placement of a firm on a BRCL. These include: <ul style="list-style-type: none">• Purchasing organization experience with the contractor over a specified period, measured in contract actions, dollars, or both.• Demonstrated percentage of on-time delivery performance over a specified period.• Demonstrated percentage of defect free units or actions over a specified period.
BRCL Review Requirements	Although the review requirements are not the same, all BRC programs have established requirements for: <ul style="list-style-type: none">• Initial review and acceptance• Periodic status review
Evaluate Competitive Offers Using BRCL	Although purchasing organizations differ in how contract award decisions are made, all consider Blue Ribbon status quantitatively when making the award decision. For example, the contracting officer may make an award to a BRCL offeror whose price is within 10 percent of a low offeror who is not on the BRCL.

Vendor Rating Systems

Introduction

Vendor rating systems (VRS) typically have three or four descriptive rating levels such as:

- green
 - yellow
 - red
- or;
- exceptional
 - acceptable
 - marginal
 - unacceptable.
-

Vendor Ratings and Criteria

To use this kind of vendor rating system, you assign each contractor a rating based on specific criteria. The number of possible ratings and criteria vary, but the placement criteria should establish minimum requirements for:

- Demonstrated percentage of on-time delivery performance over a specified period.
 - Demonstrated percentage of defect free units or contract actions over a specified period.
-

VRS Review Requirements

Although the review requirements are not all the same, these rating systems, like Blue Ribbon Contractor programs, all establish requirements for:

- Initial review and acceptance
 - Periodic status review
-

Evaluate Competitive Offers

Although purchasing organizations vary, VRS programs all combine vendor rating and price factors in the award decision. Consideration possibilities include:

- Assign offerors a preference based on a higher performance rating. For example, award criteria could provide for award of a contract to a firm with a higher price and higher vendor rating over a firm with a lower price and a lower rating.

(Consideration possibilities continued on next page)

Vendor Rating Systems (Continued)

Evaluation of
Competitive
Offers (Cont.)

-
- Estimate the Government's cost of taking increasingly greater quality assurance actions for offerors with successively lower levels of quality, and adding those costs to offerors' proposed prices in computing the evaluated prices.
 - Weight proposed prices based on the quality rating to calculate a single estimate of overall value, with award going to the offeror whose proposal offers the greatest overall value to the Government.
-

Supplier Performance Indexes (SPI)

Introduction Blue Ribbon Contractor programs establish two levels of quality consideration; vendor rating systems establish three or four. Supplier performance indexes (SPIs) provide for consideration of infinite levels of quality differences. Thus, SPIs provide the greatest incentive for continuing quality improvement. However, they also require substantially more effort and detailed information to develop and maintain.

Supplier Performance Indexes and Criteria To use an SPI, assign each contractor an index using the following general formula and data gathered over a specified period of time. Data may be gathered by the item or FSC.

$$SPI = \frac{\text{Extended Purchase Price} + \text{Quality-Related Costs}}{\text{Extended Purchase Price}}$$

Minimum SPI Cost Consideration Quality costs considered can vary, but as a minimum, include the following costs:

- Costs related to failure to deliver as scheduled
- Costs related to failure to deliver required quality

SPI Review Requirements Although the review requirements are not all the same, SPI programs, like the other programs considered above, all establish requirements for:

- Initial review and acceptance
- Periodic status review

Evaluate Competitive Offers Use the SPI as a multiplier in making the award decision. Given the method of calculation described above, the SPI can never be less than 1.00. It will be 1.00 only when there are no identified quality-related costs. Multiplying the proposed price by the SPI produces an evaluated price that considers the percentage cost of quality deficiencies experienced with the offeror.

(Continued on next page)

Supplier Performance Indexes (SPI) (Continued)

Quality-Related
Costs

Use the table below to evaluate quality-related costs factors, available data sources, and pricing objectives:

QUALITY-RELATED COSTS	
CONSIDER USE WHEN	There are price competitive sources with differing records of performance quality. Quality-related cost consideration is particularly useful for situations where there is a continuing requirement for products with similar quality requirements.
DATA SOURCES	Available Government records on the number and cost of contractor incidents of nonconformance with Government requirements. The most common quality-related costs considered are related to deficiencies in delivery and quality deficiencies identified at time of delivery.
PRICING OBJECTIVE	Minimize the total cost of the acquisition, considering: <ul style="list-style-type: none"> • Purchase price • Costs related to nonconformance
<p><i>Example of Blue Ribbon Quality Criteria Consideration:</i></p> <p>Based on demonstrated dependable quality and delivery performance, as evidenced by membership on the agency's Blue Ribbon Contractor List (BRCL), the contracting officer may award to an offeror at a price up to 10 percent higher than a lower offeror who is not on the BRCL.</p>	
<p><i>Example of Vendor Rating System (VRS) Quality Consideration:</i></p> <p>Both price and the offeror's Vendor Rating System rating will be considered in offer evaluation. Award may be made to a firm with a higher priced, higher rated offer.</p>	
<p><i>Example of Supplier Performance Index (SPI) Quality Criteria Consideration:</i></p> <p>Price evaluation will be performed using the offeror's SPI for the appropriate Federal Stock Class. (FSC). If the offeror does not have an SPI assigned, the contracting officer will assign, for purposes of evaluation, an SPI equal to the average SPI of all firms in that FSC.</p>	

4.2.1.3 Government Furnished Production and Research Property

Introduction

Another cost factor has to do with Government-furnished property (GFP). When evaluating offers:

FAR 45.2

- Eliminate any competitive advantage accruing to a contractor possessing Government furnished production and research property.
 - Consider any costs or savings to the Government related to providing GFP.
-

Eliminate Competitive Advantage in Offer Evaluation

To eliminate competitive advantage to a contractor with Government furnished production and research property, you can:

- Adjust the offers of contractors possessing GFP
 - Charge the contractors rent for using GFP
-

Adjust the Offers

FAR 52.245-9

Adjustment for evaluation purposes only is the preferred method of eliminating competitive advantage. The adjustment factor must be equal to the rent that would have been charged under the provisions of FAR 52.245-9, Use and Charges. However, this method is not appropriate when the contracting officer determines that using the factor would not affect the choice of contractor.

Charge Contractors Rent

FAR 52.245-9

Charging contractors rent for GFP is done only when adjustment of offers for award purposes is not practical. Any offeror or subcontractor may use GFP after obtaining the written approval of the cognizant contracting officer. Rent will be charged in accordance with the provisions of FAR 52.245-9, Use and Charges.

Evaluate Costs and Savings

When evaluating offers, you must also consider any costs or savings to the Government that will result from providing production or research property, regardless of any competitive advantage that may result.

(Continued on next page)

4.2.1.3 Government Furnished Production and Research Property (Continued)

Cost-Related
Evaluation
Factors

Cost-related evaluation factors for GFP must incorporate direct measurable costs either as dollar amounts or formulas. Limit consideration of these to the costs of:

- Reactivation from storage
- Rehabilitation and conversion
- Making the property available on an f.o.b. basis

If the terms of the solicitation make the contractor responsible for any of these costs, no further evaluation factors shall be used to consider that cost.

Savings-Related
Evaluation
Factors

Savings-related evaluation factors for such GFP must consider measurable savings. The dollar amount of these savings must be specified in the solicitation and used in offer evaluation. Examples of such savings include:

- Savings resulting from activating tools maintained in idle status at Government expense.
 - Savings resulting from avoiding the costs of deactivating and placing tools in layaway, storage, or idle status.
-

4.2.1.3 Government Furnished Production and Research Property (Continued)

Table Summary
FAR 52.245-9

Use the table below when considering the Government furnished production and research property factor, available data sources, and pricing objectives:

GOVERNMENT FURNISHED PRODUCTION AND RESEARCH PROPERTY CONSIDERATION		
CONSIDER USE WHEN	<u>Competitive Advantage Elimination</u> . One or more of the potential offerors have a competitive advantage because they possess Government-furnished production and research property that can be used in performing the contract.	<u>Costs and Savings from Furnishing GFP</u> . There are costs and savings that are expected to result from the furnishing of Government production and research property that must be considered in proposal evaluation.
DATA SOURCES	Government and contractor records on Government furnished production and research property in the contractor's possession. Rental criteria established in FAR 52.245-9, Use and Charges.	Estimates of the following costs related to furnishing property: <ul style="list-style-type: none"> • Reactivation • Rehabilitation & Conversion • Making property available Estimates of savings from: <ul style="list-style-type: none"> • Activation of tools maintained in idle status at Government expense • Avoidance of tool deactivation costs
PRICING OBJECTIVE	Eliminate any competitive advantage that may accrue to a firm possessing Government furnished production and research property.	Determine whether it is in the Government's best economic interest to furnish Government production and research property.
<p><i>Example of GFP Competitive Advantage Award Criteria Consideration:</i></p> <p>For purposes of offer evaluation, any offer predicated on rent-free use of Government furnished property (GFP) will be adjusted to eliminate possible competitive advantage. The adjustment will be made using a rental equipment adjustment factor equal to the allocable rent that would otherwise be charged for the GFP. Rent will be computed in accordance with FAR 52.245-9, Use and Charges.</p>		
<p><i>Example of GFP Costs and Savings Award Criteria Consideration:</i></p> <p>In addition to any other proposal adjustments, \$9,000 will be deducted from any offers proposing to use the GFP identified in Solicitation paragraph L-45. The \$9,000 represents the costs that the Government will avoid if the identified GFP is not placed in storage.</p>		

4.2.1.4 Transportation Costs

Introduction

Costs associated with transportation and traffic management must also be considered in contract award and administration. Your objective is to ensure that acquisitions are made on the basis most advantageous to the Government, and that supplies arrive in good order, in good condition, on time, at the required place.

FAR 47.301-1
& 2

Work with your agency's transportation officers during solicitation and evaluation of offers to ensure that all necessary transportation factors are considered, including transportation costs.

F.O.B.
Definition

The term *free on board (f.o.b.)* indicates the point to which delivery will be made, and if necessary, placed on board a carrier without additional charge. Usually, the f.o.b. point is either the place of shipment origin or shipment destination, but it can be any place in between.

For example, "f.o.b. origin" contracts generally require the Government to pick up the deliverable at the contractor's warehouse, with the Government responsible for shipping costs from the warehouse. In contrast, "f.o.b. destination" contracts generally require the contractor—at the contractor's expense—to ship the deliverable to a Government loading dock.

F.O.B.
Terms Selection

In general, determine the f.o.b. terms on the basis of lowest overall cost. The solicitation must specify whether offerors must submit offers:

- f.o.b. origin
 - f.o.b. destination
 - both f.o.b. origin and f.o.b. destination
 - either f.o.b. origin or f.o.b. destination at the discretion of the offeror
-

Advantages of
F.O.B. Origin
Contracts

To determine the most advantageous f.o.b. point, ask whether the Government or the contractor can get the best freight rates. If you can get better rates than the contractor, go with f.o.b. origin. If the contractor can get the best rates, go with f.o.b. destination. If you are not sure, solicit both "f.o.b. origin" and "f.o.b. destination" prices.

(Continued on next page)

4.2.1.4 Transportation Costs (Continued)

Advantages of
F.O.B. Origin
Contracts (Cont.)

Unless there are valid reasons otherwise, shipments from the Continental United States (CONUS) to locations outside CONUS must be made f.o.b. origin.

Other cost related advantages that result from f.o.b. origin contracts include one or more of the following:

- Availability of such transit privileges as stopping a carload or truckload at a specific intermediate point for storage, processing or other purposes, as specified in the carrier's rates.
- Ability to divert shipments.
- Ability to use special routings or types of equipment without price adjustments.
- Ability to use Government vehicles to transport the item.
- Opportunities for direct negotiations with shipping companies for reduced freight rates.
- Ability to use small shipment consolidation stations.

Advantages of
F.O.B.
Destination
Contracts

When acceptance must be at destination, the f.o.b. point must also be destination. However, acceptance at origin does not require that the f.o.b. point also be at origin.

Because it is more advantageous to the Government, contracts will normally require f.o.b. destination when:

- Bulk supplies, such as coal, that require other than Government-owned or operated handling, storage, and loading facilities, being shipped to locations outside the continental United States.
 - Steel or other bulk construction materials being shipped to locations outside the continental United States.
 - Supplies consist of forest products such as lumber.
 - Supplies consist of perishable or medical items which are subject to intransit deterioration.
 - Evaluation of f.o.b. origin offers is anticipated to result in increased administrative lead time or administrative cost that would outweigh the potential advantages of an f.o.b. origin determination.
-

(Continued on next page)

4.2.1.4 Transportation Costs (Continued)

Evaluate Price
Competitive
Offers

When evaluating offers for supplies, consider transportation costs in determining the lowest evaluated price.

The simplest evaluation situation occurs when all offers are quoted **f.o.b. destination**. Since transportation is included in the price, no further adjustments are required.

When offers are quoted **f.o.b. origin**, consider the following two factors along with purchase price when determining the lowest evaluated price:

- The cost of transportation from the offeror's designated point of origin to the destination defined in the solicitation. The Government normally uses land transportation rates in proposal evaluation.
- When provided for in the solicitation, proposed cost-reimbursable differentials based on possible routing conditions. These contingencies may be included by offerors to compensate for an unfavorable routing condition. Evaluation is based on the routing conditions anticipated at the time of award.

When offers may be quoted either F.o.b. origin or F.o.b. destination, offer evaluation will include the cost of transportation. F.o.b. destination offers will not require adjustment. F.o.b. origin offers will consider the factors described above. Make award to the offeror with the lowest evaluated price.

(Continued on the next page)

4.2.1.4 Transportation Costs (Continued)

Transportation
Cost
Considerations

Use the table below when considering transportation cost factors, available data sources, and pricing objectives:

FAR 47.306-2

TRANSPORTATION COST CONSIDERATIONS	
CONSIDER USE WHEN	Differences in transportation cost will be a factor in determining the lowest evaluated offeror. When prices are offered f.o.b. destination, transportation costs are assumed to be included in offered prices. When offers are quoted f.o.b. origin, the cost of transportation-related costs must be expressly considered when determining the evaluated price.
DATA SOURCES	The primary source of information on all questions related to transportation is the transportation officer. Offerors will include transportation costs in f.o.b. destination prices.
PRICING OBJECTIVE	Award contracts to offerors whose proposals are most advantageous to the Government. Evaluate f.o.b. origin proposals considering all transportation related costs, including applicable routing condition differentials.
<p><i>Example of Transportation Award Criteria Consideration:</i></p> <p>Award will be made f.o.b. destination or f.o.b. origin to the offeror with the lowest evaluated price. F.o.b. origin offers will be evaluated on the basis of unit price bids plus transportation cost to destination based on the most economical rates available to the Government, in accordance with FAR 47.306-2.</p>	

4.2.1.5 Options and Multiyear Contracting

Introduction Contracts are normally written to acquire supplies and services in support of identified requirements, and funded with funds approved by Congress for the current year.

Options and multiyear contracting are two methods of establishing longer-term relationships with contractors. Both of these techniques may be used in either sealed bidding or negotiation.

Options **Options** are unilateral rights prescribed in a contract, which, for a specified time, permit the Government to elect to purchase additional supplies or services called for in the contract or to elect to extend the term of the contract.

Reasons for Using Options Options are included in contracts to attract more effective competition, to reduce the administrative costs of repetitive competition, to eliminate the cost associated with disrupted support, and to provide for greater continuity in the contracting situation.

Exercising Options The Government is under no obligation to exercise any options prescribed in a particular contract. Options may be exercised at award or at a later time as prescribed in the contract. Options are funded when exercised using funds available at that time.

Multiyear Contracting **Multiyear Contracting** is a special contracting method for acquiring known quantity and cost requirements that do not exceed planned requirements over five years (unless otherwise authorized by statute). This contracting technique can be employed even though the total funds ultimately to be obligated are not available at the time of contract award.

Reasons for Using Multiyear Contracting Reasons for multiyear contracting include:

- Lower costs
- Enhanced standardization
- Reduced administrative burden
- Continuity of production or performance
- Stabilization of contractor work force
- Reduced Government quality control
- Increased competition
- Increased contractor incentive to improve quality

(Continued on next page)

4.2.1.5 Options and Multiyear Contracting (Continued)

Multiyear Awards	In multiyear contracting, prices are solicited for both the current one-year requirement alone and for the total multiyear requirement. Award is made on whichever alternative offers the lowest unit prices to the Government.
------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Funding Multiyear Contracts	Funds are obligated for only the first years' requirement, with succeeding year's requirements funded annually. If funds do not become available for succeeding years' requirements, the agency must cancel the contract. To protect the contractor, multiyear contracts typically contain a contract provision that provides for reimbursement to the contractor of any nonrecurring expenses that were included in the prices of the cancelled items.
-----------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

You may use multiyear contracting for a wide variety of supplies and services when one-year funds or multiyear funds are available. In situations where one-year funds are used, the use of multiyear contracting must be specifically authorized by statute.

Evaluate Competitive Offers-Options	<u>Option Provisions.</u> Solicitations containing option provisions must state the basis for evaluation. Evaluation may either include or exclude option provisions. Include options in the evaluation of offers when it has been determined, prior to solicitation, that the Government is likely to exercise the options.
-------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Options need not be included in the evaluation of offers when the contracting officer determines that evaluation would not be in the best interest of the Government, and this determination is approved at a level above the contracting officer. For example, the contracting officer may choose not to evaluate an option when there is a reasonable certainty that funds will not be available by the time the option must be exercised.

Evaluate Competitive Offers— Multiyear Contracting	<u>Multiyear Contracting.</u> Solicitations must state the requirement for the first program year and for the multiyear contract including the first year.
----------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------

(Continued on next page)

4.2.1.5 Options and Multiyear Contracting (Continued)

Evaluate
Competitive
Offers—
Multiyear
Contracting
(Cont.)

When previous purchases have been competitive, provision must be made for offerors to offer prices for the first program year, for the total program, or both. When previous purchases have been competitive and competition for future acquisitions would be impractical, offers may be restricted to the multiyear requirement only to avoid the possibility of a first program year buy-in.

When previous acquisitions have been noncompetitive, and a first program year buy-in is not anticipated, each offeror must submit a price on the first program year and may submit a price on the multiyear requirement.

Prices for all years of the multiyear requirement must be the same except for provisions for economic price adjustments.

The goal of evaluation is to determine the lowest evaluated unit price. If both first program year and multiyear contract prices were solicited, low offers for each requirement will be compared, and award will be made to the lowest evaluated unit price. If pricing was restricted to the multiyear requirement, award will be made to the lowest multiyear offer. Evaluation of offers must involve a determination of the lowest overall evaluated cost to the Government for both the multiyear and first program year acquisition. The costs of the two methods of purchase are then compared.

(Continued on next page)

4.2.1.5 Options and Multiyear Contracting (Continued)

Summary

Use the table below to consider options and multiyear contracting, available data sources, and pricing objectives:

FAR 52.217-5

OPTIONS AND MULTIYEAR CONTRACTING CONSIDERATION		
CONSIDER USE WHEN	<u>Options</u> . There are reasonable estimates of future requirements, funds are not currently available, and the contracting officer believes that the use of options will accomplish one or more of the following: attract more effective competition, reduce the administrative costs of repetitive competition, eliminate the costs associated with disrupted support, or provide for greater continuity in the contracting situation.	<u>Multiyear Contracting</u> . There are reasonable estimates of future requirements, use of multiyear contracting is authorized, and the contracting officer believes that multiyear contracting will benefit the Government. Two of the most important benefits are increased competition and the reduction of acquisition costs.
DATA SOURCES	The primary source of information on the price of options is the offeror's proposal.	The primary source of information on the price of multiyear contracting is the offeror's proposal.
PRICING OBJECTIVE	Award contracts to offerors whose proposals are most advantageous to the Government. Options must be part of offer evaluation when it has been determined prior to solicitation that the Government is likely to exercise the options. Options need not be included in evaluation of offers when it is determined that evaluation would not be in the best interest of the Government.	Award contracts to offerors whose proposals are most advantageous to the Government. Evaluation determines if the lowest unit price is for award of only the first program year or for award of the multiyear contract, including the first year.
<p><i>Example of Option Award Criteria Consideration:</i></p> <p>EVALUATION OF OPTIONS (JUL 1990)</p> <p>Except when it is determined in accordance with FAR 52.217-5 not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).</p>		

4.2.1.6 Life-Cycle Costs

Definition Life-cycle cost is the total cost of an item or system over its full life, including the costs of:

- Development
- Production
- Operation and Maintenance
- Disposal
- Replacements

Life-Cycle Cost Context To be meaningful, an expression of life-cycle cost must be placed in context with:

- The cost elements included
- Period of time covered
- Assumptions and conditions applied
- Whether the analysis is intended to be a relative comparison or an absolute expression of expected costs.

Definitions of Life-Cycle Cost Elements **Development Cost**—all costs, including contract costs, associated with the research and development needed to produce an operational item or system.

Production Cost—all contract costs associated with the production of an item or system.

Operation and Maintenance Cost—all costs, including contract costs, associated with equipment, supplies, and services needed to operate and maintain an operational system.

Disposal Costs—all costs, including contract costs, associated with removing operational equipment from service and disposing of it.

Replacement Costs—the cost of acquiring replacements for items that have outlived their useful lives. Replacement costs are of significance when the items being offered by competing vendors have different useful lives (e.g., when the light bulbs of Offeror A have an average life of 100 hours while the light bulbs of Offeror B have an average life of 600 hours).

General Considerations Consideration of life-cycle costs in offer evaluation is particularly important in situations where the item or system cost of operation and maintenance and the cost of disposal are significant in comparison with the cost of purchase or production.

(Continued on next page)

4.2.1.6 Life-Cycle Costs (Continued)

General Considerations (Cont.)

In such situations:

- Identify factors with a significant effect on life-cycle cost results, and implement tradeoff studies to evaluate alternative actions which could reduce costs related to those factors.
- Consider life-cycle costs in product design.
- Choose acquisition strategies which help minimize life-cycle costs.
- Select sources for development and production which offer the best balance between product performance and the life-cycle cost.
- Establish contract commitments, when appropriate, to help in controlling life-cycle cost results.
- Conduct follow-on efforts subsequent to purchase for purposes of further reducing life-cycle cost.

Evaluate Competitive Offers

In order to evaluate life-cycle costs in competitive proposals, solicitations must require offerors to estimate key elements of life-cycle cost. To prepare such estimates, the offeror must have information on item operation, such as usage, operating environment, and expected life. As a minimum, offers should provide information, supported by test or operational data, for the key elements identified. Typical life-cycle cost elements include:

- Average unit price, including recurring and nonrecurring costs.
- Unit costs to support operating crew and maintenance manpower requirements.
- Unit costs for operating energy and supply requirements.
- Costs related to operational reliability (average time between failures) and maintainability (expected cost to maintain, including repair).
- Discounted replacement costs, given differences in expected life of items from competing vendors.

Long Term Cost Consideration

When life-cycle costs continue over a period of years, costs should be compared in terms of a constant dollar base and should reflect the relative timing of both acquisition and ownership costs. If necessary, apply adjustments for uncertainty, time value of money, inflation, etc., to the basic estimate to support individual decision requirements.

(Continued on the next page)

4.2.1.6 Life-Cycle Costs (Continued)

Reasonable,
Realistic, and
Complete
Estimates

In offer evaluation, the reasonableness, realism, and completeness of the life-cycle cost estimate must be evaluated. Ask the following questions:

- Is the estimating methodology reasonable?
- Are the costs realistic when compared with other known information, including past cost performance?
- Is the estimate complete in its consideration of all identified cost elements?

If estimates are reasonable, realistic, and complete, award may be made based on lowest evaluated life-cycle cost, or, life-cycle cost may be considered as a major factor in an award decision that also considers other technical characteristics of the item or system.

(Continued on next page)

4.2.1.6 Life-Cycle Costs (Continued)

Life-Cycle Cost Consideration Use the table below to consider the life-cycle cost factor, available data sources, and pricing objectives:

LIFE-CYCLE COST CONSIDERATION	
CONSIDER USE WHEN	The item or system cost of operation and maintenance and/or the cost of disposal are significant in comparison with the cost of purchase or production. Analysis can range from consideration of a single significant operation and maintenance or disposal cost to complete consideration of all life-cycle costs.
DATA SOURCES	<p>The user is the primary source of information on item operation, such as usage, operating environment, and expected life.</p> <p>The offeror is the primary source of cost information concerning the life-cycle costs of a particular item or system. As a minimum, offers should provide information, supported by test or operational data, for key elements identified.</p>
PRICING OBJECTIVE	<p>Award contracts to offerors whose proposals are most advantageous to the Government.</p> <p>Life-cycle cost estimates must be evaluated for reasonableness, realism, and completeness. If estimates are reasonable, realistic, and complete, award may be made based on lowest evaluated life-cycle cost, or, life-cycle cost may be considered as a major factor in the award decision.</p>
<p><i>Example of Life-Cycle Cost Award Criteria Consideration:</i></p> <p>Offers will be evaluated on the basis of the lowest cost to the Government based on the SUM of the following:</p> <ul style="list-style-type: none"> • <i>Purchase Price</i> • <i>Repair Cost</i>—derived from the mean time between failure rate* and repair prices from applicable maintenance contracts. • <i>Ribbon Cost</i>—derived from ribbon life* and the unit price for ribbons. • <i>Energy Cost</i>—derived from the published electrical requirements of the motor and the current unit price for electricity. <p>LESS the value of the machine after 10 years—derived from historical resale prices.</p> <p>* As determined by testing on an automatic typing machine.</p>	

4.2.1.7 Energy Conservation and Efficiency

Introduction

FAR 23.203

The cost of energy is an important cost of operating many items and systems. FAR 23.203 requires that, whenever the results would be meaningful, practical, and consistent with agency program and needs, agencies must apply energy conservation and efficiency criteria to acquisitions. These criteria must be considered along with price and other relevant factors in evaluating offers for award.

Energy Use and Efficiency Labels

Agencies must consider energy use and efficiency labels on all covered products and energy efficiency standards as they become available. Covered consumer products include: central air conditioners, clothes dryers, clothes washers, freezers, and room air conditioners.

Long Term Energy Costs

As with life-cycle cost evaluations, when energy costs continue over a period of years, costs should be compared in terms of a constant dollar base and should reflect the relative timing of both acquisition and ownership costs. If necessary, apply adjustments for uncertainty, time value of money, inflation, etc to the basic estimate, to support individual decision requirements.

Evaluate Competitive Offers

Award may be made based on lowest evaluated cost, including energy cost, or, energy cost may be considered as a major factor in an award decision that also considers other technical characteristics of the item or system.

(Continued on next page)

4.2.1.7 Energy Conservation and Efficiency (Continued)

Energy Conservation and Efficiency Considerations

Use the table below to consider the energy conservation and efficiency factor, available data sources, and pricing objectives:

ENERGY CONSERVATION AND EFFICIENCY CONSIDERATION	
CONSIDER USE WHEN	Results would be meaningful, practical, and consistent with agency programs and needs.
DATA SOURCES	Energy use and efficiency labels provide data on all covered products and energy efficiency standards as they become available. Other use and test data can provide useful data on energy usage.
PRICING OBJECTIVE	Award contracts to offerors whose proposals are most advantageous to the Government. Award may be made based on lowest evaluated cost, including energy cost. Energy cost may be considered as a major factor in an award decision that also considers other technical characteristics of the item or system.
<p><i>Example of Energy Award Criteria Consideration:</i></p> <p>Award will be made to the firm whose offer will provide the lowest total cost of acquisition and ownership to the Government during the first year of operation, considering price and energy cost. Estimates of energy cost will be based on the Energy Use and Efficiency Label provided by the manufacturer under 42 U.S.C. 6296.</p>	

4.2.1.8 Lease vs. Purchase Considerations

Introduction	Agencies should consider whether to lease or purchase equipment based on a case-by-case evaluation of comparative costs and other factors.
When to Purchase	Generally, the purchase method is appropriate if the equipment will be used beyond the point at which cumulative leasing costs exceed purchase costs. You should not rule out equipment purchase, in favor of leasing, merely because future technological advances might make the selected equipment less desirable.
Primary Factors to Consider	As a minimum, consider the following factors: <ul style="list-style-type: none">• Estimated length of time that the equipment will be used and the extent of use during that period.• Financial and operating advantages of alternative types of equipment• Cumulative rental payments for the estimated period of use• Net purchase price• Transportation and installation costs• Maintenance and other service costs• Potential obsolescence of the equipment because of imminent technological improvements
Additional Factors to Consider	In addition, consider the following factors, as appropriate, depending on the type, cost, complexity, and estimated period of use of the equipment: <ul style="list-style-type: none">• Availability of purchase options• Potential for use of the equipment by other agencies after its use by the acquiring agency• Trade-in or salvage value• Imputed interest• Availability of a servicing capability, especially for highly complex equipment

(Continued on the next page)

4.2.1.8 Lease vs. Purchase Considerations (Continued)

Evaluate
Competitive
Offers

Generally the lease vs. purchase decision is not made as part of an evaluation of competitive offers. Rather, it is made based on data collected especially for this purpose.

However, there are situations in which it may make sense to solicit such competition. For example, if equipment requires a unique maintenance capability, proposals based on lease with maintenance might be competed against purchase prices and contract or in-house maintenance.

Summary

FAR 7.401
FAR 7.402

Use the table below to consider lease vs. purchase, available data sources, and pricing objectives:

LEASE VS. PURCHASE CONSIDERATION	
CONSIDER USE WHEN	Lease and purchase appear almost equally attractive. Accepting offerors based on both lease and purchase will maximize available competition and encourage the best price for both methods.
DATA SOURCES	Offerors will be a prime source of information about equipment lease and purchase costs. The user is the primary source of information on item operation, such as usage, operating environment, and expected life.
PRICING OBJECTIVE	Award contracts to offerors whose proposals are most advantageous to the Government. Award may be made based on lowest overall evaluated cost.
<p><i>Lease vs. Purchase Award Criteria Consideration:</i></p> <p>The Government will acquire the equipment identified in Section B by either lease or purchase. The method of acquisition and the successful offeror will be determined based on the lowest discounted total cost to the Government for acquisition and disposition. Operation and maintenance costs will not be considered in offer evaluation.</p>	

4.2.2 Identify Formula(s) for Evaluation

Introduction

This chapter has outlined eight different price-related factors that you should consider in appropriate award situations. For each factor, a summary table included information on when use of the factor should be considered, data sources, and the accompanying price objective. Development and application of specific formulas will be described in Chapter 5. In this section you will consider how these formulas are selected, and what data is necessary to collect.

Evaluate Purchase Situation and Requirements

Many people see pricing as "number crunching." While pricing does involve numbers, there is much more to pricing than that. You need product knowledge to understand what numbers are important and how these relate to the purchase decision. Remember that each purchase situation has its own particular requirements. Carefully examine all requirements before selecting contract award criteria.

Identify Appropriate Price-Related Factors

When particular price-related factors fit the purchase situation, they should be applied. However, they should not be forced into situations where they do not apply. Often, more than one factor may apply to a particular situation. If you use more than one price-related factor to arrive at an award decision, try to ensure that the analysis does not become so complex that offerors may no longer trust the results of the evaluation process.

Usually quantitative evaluation criteria are preferable to subjective criteria. For example, it is easier to state that a winning proposal had the lowest evaluated price than it is to explain to an unsuccessful offeror that the winning proposal offered a better combination of price and quality.

Risks of Deceptive Offers

Still, the risk of deceptive offers forces contracting officers to do more than just look at individually evaluated prices. Occasionally, if adequate care is not taken to develop criteria for price evaluation, offerors may take the opportunity to "game" or provide deceptive data in their proposals.

If option prices are not considered in the contract award decision, and competition will be significantly reduced after award of the basic contract, an offeror may offer an extremely low price on the basic contract and much higher prices on the options. You must determine whether the evaluated price is reasonable, given all available information about the contract requirement.

4.2.3 Select Method of Award Clauses or Provisions

See sections 4.1. and 4.2.1.

Purchase Widgets (Cont.)

As you look back over past purchases and talk to widget users, you note that users perceive a substantial difference in the quality of widgets that have been acquired in the past. Two of the potential sources have a reputation for always delivering on time and without defect. Other sources, while acceptable, have had occasional problems involving on-time delivery and product defects.

It appears that your organization's new Blue Ribbon Contractor Program will enable you to make the best possible award decision. To implement the Program, you select the following award criteria:

"Based on demonstrated dependable quality and delivery performance, as evidenced by membership on the agency's Blue Ribbon Contractor List (BRCL), the contracting officer may award to an offeror at a price up to 10 percent higher than a lower offeror who is not on the BRCL.

CHAPTER 5

APPLY PRICE-RELATED FACTORS

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective 5/1

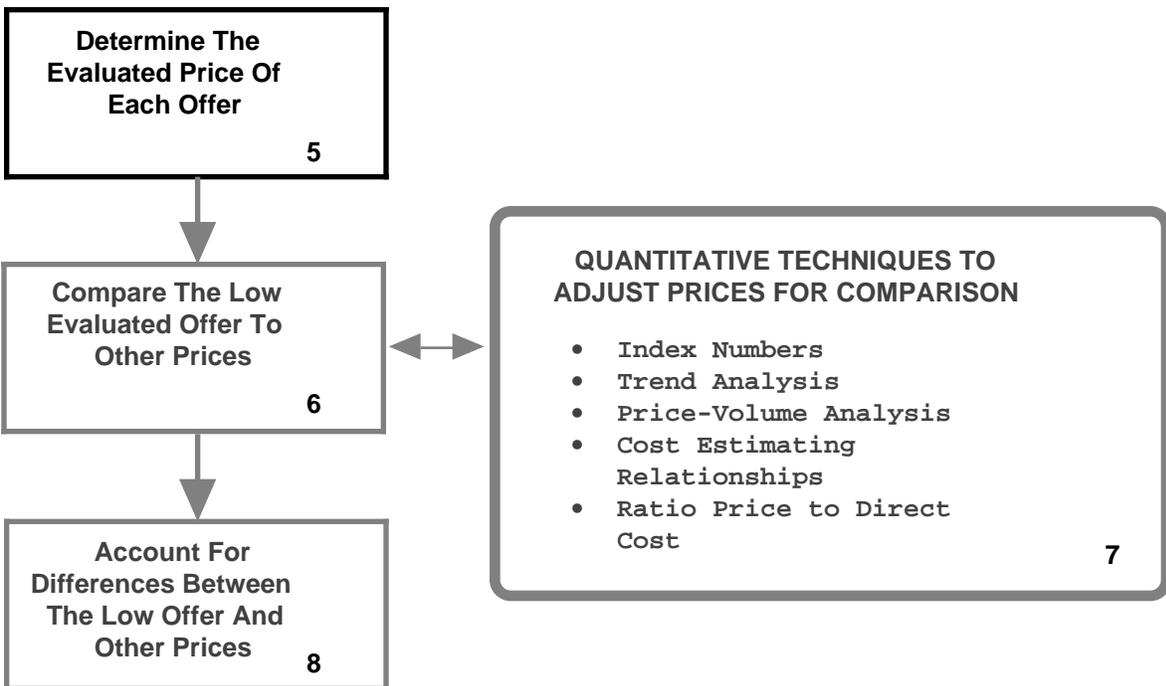
Apply all price-related factors in the procurement and determine the lowest evaluated price, for example:

- Assumed Administrative Cost
 - Application of the Buy American Act
 - Quality-Related Factors
 - Government Furnished Production and Research Property
 - Transportation Costs
 - Energy Conservation and Efficiency
 - Lease vs. Purchase
-

Procedural Steps

Procedural Steps The following figure shows where this chapter fits into the conduct of a price analysis.

**STEPS IN ANALYZING PRICES
(Chapters 5 - 8)**



Overview

Introduction

In Chapter 4, you learned how to determine the most advantageous award strategy, by:

- Identifying circumstances that would warrant use of specific factors.
- Selecting appropriate provisions for price evaluation and award.

In this chapter

In this chapter, you will learn how to apply selected price-related factors when you make the award decision.

Specifically, you will consider the use of seven price-related factors in the award decision:

SECTION	DESCRIPTION	SEE PAGE
A	5.1 Apply Assumed Administrative Costs Factors	5-7
B	5.2 Apply Buy American Act Criteria	5-11
C	5.3 Apply Quality-Related Factors	5-17
	5.3.1 Blue Ribbon Contractor Programs	5-18
	5.3.2 Vendor Rating Systems	5-21
	5.3.3 Supplier Performance Index	5-24
D	5.4 Apply Government Furnished Production and Research Property Factors	5-27
	5.4.1 Eliminate Competitive Advantage	5-28
	5.4.2 Consider Costs and Savings to the Government	5-31
E	5.5 Apply Transportation Cost Factors	5-35
F	5.6 Apply Energy Conservation and Efficiency Factors	5-39
G	5.7 Consider Lease vs. Purchase	5-43

Overview (Continued)

In this Chapter
(Cont.)

For each factor, the text will be divided into two sections:

- General evaluation requirements
- Sample evaluation

The general evaluation requirements section will cover the general elements of factor evaluation, including the types of cost that you should consider.

The sample evaluation section will cover the evaluation of prices using the evaluation criteria referenced or developed in Chapter 4.

Purchase Widgets (Cont.)

Your solicitation has been "on the street." It includes one price-related factor — Quality, based on application of the Blue Ribbon Contractor List.

The offers are in hand. The time has come to open them and apply the price-related factor. Using the price-related factor, you must now calculate an "evaluated" price for each offer.

SECTION A

5.1 APPLY ASSUMED ADMINISTRATIVE COST FACTORS

Introduction

In the multiple contract award evaluation, assumed administrative cost is one of the primary price-related factors that should be applied as you determine the lowest evaluated price. There are four steps that cover this determination.

General Evaluation Requirements

FAR 14.201-6(q)
FAR 15.407(h)

Step 1: Determine Solicitation Provisions

When the contracting officer determines that making multiple awards might be economically advantageous to the Government, you must insert a clause in the solicitation notifying the bidder/offeree that the assumed administrative cost of making multiple awards is \$500.

Step 2: Determine Total Bid/Offered Price

When all bids/offers have been received, you must determine the total bid/offered price for each item for each bidder/offeree.

Step 3: Evaluate Possible Award Combinations

In your evaluation of bids/offers, you must apply the \$500 in administrative costs when evaluating the possible award combinations. In relatively simple award situations, you might be able to determine the proper award decision without detailed calculations. In most situations, however, you must evaluate all possible award combinations. If the number of bidders/offerees is so large that evaluation of all possible methods of award would be prohibitive, you may exclude bidders/offerees that obviously have no chance of receiving the award. When determining which bidders/offerees do have a chance of receiving an award, consider the following:

(Continued on next page)

5.1 Apply Assumed Administrative Cost Factors (Continued)

General
Evaluation
Requirements
(Cont.)

-
- A successful bidder/offeror will NORMALLY be low on one or more items.
 - If there are many bidders/offerors who are low on different items, it MAY BE POSSIBLE for a firm that is close to the low bidder/offeror on many items to win an award when the cost of contract administration is considered.

Step 4: Make Award Decision

Select the bids/offers that provide the lowest evaluated prices.

Sample
Evaluation

FAR 52.214-22
FAR 52.215-34

Step 1: Determine Solicitation Provisions

Similar evaluation requirements are described in FAR 52.214-22 for sealed bidding and in FAR 52.215-34 for negotiation. As an example of the evaluation process, consider an award under sealed bidding procedures. Assume that the following clause was included in the solicitation:

FAR 52.214.22

EVALUATION OF BIDS FOR MULTIPLE AWARDS (MAR 1990) [FAR 52.214.22] In addition to other factors, bids will be evaluated on the basis of advantages and disadvantages to the Government that might result from making more than one award (multiple awards). It is assumed, for the purposes of evaluating bids, that \$500 would be the administrative cost to the Government for issuing and administering each contract awarded under this solicitation, and individual awards will be for the items or combinations of items that result in the lowest aggregate cost to the Government, including the assumed administrative costs.

(Continued on next page)

5.1 Apply Assumed Administrative Cost Factors (Continued)

Sample Evaluation (Cont.)

Step 2: Determine Total Bid/Offered Price

In your evaluation of bids, you must consider the possible award combinations. Bids on the three different line items in the solicitation were received from two bidders. The extended line item totals, unit price multiplied by quantity, are shown in the table below.

ITEM	BIDDER #1	BIDDER #2
1	\$74,000	\$74,450
2	\$94,750	\$94,250
3	\$22,125	\$21,500

Step 3: Evaluate Possible Award Combinations

Given the evaluation criteria and the bids, there are three possible methods of contract award:

- Multiple Awards
- Award All Items to Bidder #1
- Award All Items to Bidder #2

Multiple Awards

Awards to both Bidders #1 and #2. Looking at the bids without considering the \$500 evaluation factor, making multiple awards appears to be the logical decision. Following this procedure, the total evaluated price would be:

ITEM	BIDDER # 1 AWARD	BIDDER # 2 AWARD	TOTAL PRICE
1	\$74,000		\$74,000
2		\$94,250	\$94,250
3		\$21,500	\$21,500
Admin Cost	\$ 500	\$ 500	\$ 1,000
Evaluation Price	\$74,500	\$116,250	\$190,750

(Continued on next page)

5.1 Apply Assumed Administrative Cost Factors (Continued)

Sample
Evaluation
(Cont.)

Step 3: Evaluate Possible Award Combinations (Cont.)

Award All Items to Bidder #1

If all items were awarded to Bidder #1, the total evaluated price would be:

ITEM	BIDDER # 1 AWARD	BIDDER # 2 AWARD	TOTAL PRICE
1	\$74,000		\$74,000
2	\$94,750		\$94,750
3	\$22,125		\$22,125
Admin Cost	\$ 500		\$ 500
Evaluation Price	\$191,375		\$191,375

Award All Items to Bidder # 2

If all items were awarded to Bidder #2, the total evaluated price would be:

ITEM	BIDDER # 1 AWARD	BIDDER # 2 AWARD	TOTAL PRICE
1		\$74,450	\$74,450
2		\$94,250	\$94,250
3		\$21,500	\$21,500
Admin Cost		\$ 500	\$ 500
Evaluation Price		\$190,700	\$190,700

Step 4: Make Award Decision

In this case, your decision should be to award the entire requirement to Bidder #2, because this would result in the lowest aggregate price to the Government. Although multiple awards appeared to be the correct decision at first, you can see that, when the assumed administrative cost was factored in, the total evaluated price was lowest if all items are awarded to Bidder #2.

SECTION B

5.2 APPLY BUY AMERICAN ACT CRITERIA

Introduction

In chapter 4, you learned that the Buy American Act establishes criteria for determining the low offer when you are offered both domestic and foreign products in competition with one another for in response to your solicitation. In this chapter, you will have an opportunity to apply these criteria.

General Evaluation Requirement

Step 1: Determine Solicitation Provisions

First, you must determine that the Buy American Act applies to the acquisition. The first question is whether the clause at FAR 52.225-3, “Buy American Act—Supplies” was required for the acquisition and incorporated in the solicitation. This clause obliges the contractor to deliver “only domestic end products, except those—

- (1) For use outside the United States;
- (2) That the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality;
- (3) For which the agency determines that domestic preference would be inconsistent with the public interest; or
- (4) For which the agency determines the cost to be unreasonable (see section 25.105 of the Federal Acquisition Regulation).

Second, you must examine the “Buy American Certificate” submitted by each offeror to determine if any admit to offering a foreign product. If any list an “Excluded End Product” on the Certificate, the Buy American Act criteria would apply unless:

- The country of origin or product are covered by one of the many exceptions to application of those criteria in FAR Part 25, or
- No competing firm has offered a domestic product (i.e., an “unexcluded” end product) in response to your solicitation.

For the purposes of this discussion, assume that an “Excluded End Product” (i.e., a foreign offer) is in competition with domestic offers and that there is no applicable exception to the Act.

(Continued on next page)

5.2 Apply Buy American Act Criteria (Continued)

General
Evaluation
Requirements
(Cont.)

Step 2: Determine Total Bid/Offered Price

Applying all other price-related factors in the solicitation **first** (including any duty on the foreign product), determine the low evaluated price of the foreign offer and each of its domestic counterparts.

Step 3: Evaluate Possible Award Combinations

If the “lowest acceptable domestic offer” is from a large business that is not a labor surplus area concern, add 6% to the cost of the “lowest acceptable foreign offer”.

If the “lowest acceptable domestic offer” is from either (1) a small business or (2) any other business that is a labor surplus area concern, add 12% to the cost of the “lowest acceptable foreign offer”.

Step 4: Make Award Decision

Award to the offeror with the lowest evaluated price, after application of the Buy American criteria in Step 3. Note that ties are settled in favor of domestic offers.

(Continued on next page)

5.2 Apply Buy American Act Criteria (Continued)

Sample
Evaluation

Step 1: Determine Solicitation Provisions

For the purposes of this sample evaluation, assume that the “Buy American Act” applies to the acquisition, with no applicable exception to the Act for the end product of the acquisition. The acquisition is for radar detectors. You have received offers from three firms — Offeror #1, Offeror #2, and Offeror #3.

As your first step, examine the Buy American Certificate. Having done so, you discover that Offeror #1 has completed the certificate as follows.

BUY AMERICAN CERTIFICATE (DEC 1989)	
The offeror certifies that each end product, except those listed below, is a domestic end product (as defined in the clause entitled “Buy American Act—Supplies”), and that components of unknown origin are considered to have been mined, produced, or manufactured outside the United States.	
<i>Excluded End Products</i>	<i>Country of Origin</i>
<i>Item 1AA Radar Detector</i>	<i>Greater Acquatica</i>

(List as necessary)	
Offerors may obtain from the contracting officer lists of articles, materials, and supplies excepted from the Buy American Act.	
(End of provision)	

Offeror 2 and Offeror 3 left their respective certificates blank, meaning (presumably) that their radar detectors are made in the United States.

The next issue is whether any exception applies to Greater Acquatica. There being no exception covering that nation's products, the next step is to apply the Buy American Act criteria.

(Continued on next page)

5.2 Apply Buy American Act Criteria (Continued)

Sample Evaluation

Step 2: Determine Total Bid/Offered Price

The following table lists the evaluated price of each offer, after applying all other price-related factors in the RFP.

ITEM	OFFEROR # 1	OFFEROR # 2	OFFEROR #3
Radar Detectors	\$74,000	\$79,000	\$80,000

Step 3: Evaluate Possible Award Combinations

Offeror #2 is a large business, with facilities in a large suburb that has a low unemployment rate and has therefore not been designated a Labor Surplus Area. Its offer is acceptable. Offeror #3 is a small business and is located in a designated Labor Surplus Area. Its offer is acceptable as well.

Which offeror is low? To find out, apply the Buy American criteria as follows:

ITEM	OFFEROR # 1	OFFEROR # 2	OFFEROR #3
Radar Detectors	\$74,000	\$79,000	\$80,000
+ 6%	+ \$4,440	N/A	N/A
Adjusted Price	\$78,440	\$79,000	N/A

(Continued on next page)

5.2 Apply Buy American Act Criteria (Continued)

Sample
Evaluation
(Cont.)

Step 4: Make Award Decision

The foreign offer is the low offer and remains in line for award.

Had Offer #1 been in competition ONLY with Offer #3, Offer #3 would have been low. Offer #3 exceeds the foreign offer by just 8% — within the 12% margin for small business and for Labor Surplus Area businesses.

However, for the purposes of the Buy American Act, you only compare the “lowest acceptable domestic offer” with the “lowest acceptable foreign offer”. In this case, therefore, you only compared Offer #1 with Offer #2 — and Offer #1 has the edge in that competition even with the 6% add-on to its price.

SECTION C

5.3 APPLY QUALITY-RELATED FACTORS

Introduction

As stated in Chapter 4, analysis of quality-related costs provides a quantitative tool for differentiating between minimally acceptable and outstanding performance. Such analysis makes use of a broad data base and can be applied to a wide range of purchases, from relatively small to very large.

General Evaluation Requirements

Step 1: Determine Solicitation Provisions

You should advise potential offerors that contract award will be made based on an evaluation of both price and quality-related factors.

In Chapter 4, you learned about three approaches for evaluating the cost of quality in the contract award decision. These were:

- Blue Ribbon Contractor Programs
- Vendor Rating Systems
- Supplier Performance Indexes

Step 2: Determine Total Bid/Offered Price

When offers are received, you must determine the total price offered for each item for each offeror.

Step 3: Evaluate Possible Award Combinations

Next, you will examine how to evaluate quality-related factors in each approach to the contract award decision. You will not examine the specific details of the development of each rating and index system.

There are no specific universal system requirements used by all agencies. General requirements and procedures were described in Chapter 4.

Step 4: Make Award Decision

Select the offer that provides the best combination of quality and price.

5.3.1 Blue Ribbon Contractor Programs

Introduction/
Review

As described in Chapter 4, Blue Ribbon Contractor Lists (BRCL) quantitatively consider the cost of quality in the contract award decision. Placement on a Blue Ribbon Contractor List (BRCL) is typically determined independently for each Federal Stock Class (FSC).

General
Evaluation
Requirements

When evaluating possible award combinations (Step 3), you should be aware that, once a firm is placed on the Blue Ribbon Contractor List (BRCL), it qualifies for special pricing consideration over firms that are not on the BRCL. The degree of that consideration should depend on the savings to the Government that result from the firm meeting BRCL standards. Personnel familiar with BRCL benefits should work with contracting management to establish the pricing adjustment. Typically, awards can be made to a BRCL firm whose offer is within 10 percent of a low offer that was not submitted by a BRCL firm.

Sample
Evaluation

Step 1: Determine Solicitation Provisions

Assume that the following Blue Ribbon Contractor (BRC) provision, taken from Chapter 4, was included in the solicitation. Note that the Government may award to a BRCL offeror at a price up to 10 percent higher than that of a low offeror who is not on the BRCL.

Award will be made to the firm whose offer provides the greatest value to the Government, price, quality, delivery performance, and other factors considered. Based on demonstrated dependable quality and delivery performance, as evidenced by membership on the Agency's Blue Ribbon Contractor List (BRCL), the contracting officer may award to a BRCL offeror at a price up to 10 percent higher than a lower offeror who is not on the BRCL.

(Continued on next page)

5.3.1 Blue Ribbon Contractor Programs (Continued)

Sample
Evaluation
(Cont.)

Step 2: Determine Total Bid/Offered Price

In this example, four offers were received to provide the single item in the solicitation. Two were received from BRCL firms and two were from firms not on the BRCL.

OFFEROR	BRCL?	OFFER
1	Yes	\$131,000
2	No	\$120,000
3	No	\$122,000
4	Yes	\$134,000

Step 3: Evaluate Possible Award Combinations

In your evaluation, you note that the low offer, \$120,000, came from a firm not on the BRCL. The lowest offer from a BRC came from Offeror #1, for \$131,000.

The award criteria state that "the contracting officer may award to a BRCL offeror at a price up to 10 percent higher than a lower offeror who is not on the BRCL." To determine which firm should receive the award, you must increase the low offer by 10 percent. This will result in an evaluated price of \$132,000.

(Continued on next page)

5.3.1 Blue Ribbon Contractor Programs (Continued)

Sample Evaluation (Cont.)

Step 3: Evaluate Possible Award Combinations (Cont.)

Note that it is not reasonable to reduce the BRCL offer by 10 percent for two reasons:

- Reducing the larger BRCL offer by 10 percent would result in a larger adjustment than originally intended. For example, 10 percent of \$120,000 is \$12,000, but 10 percent of \$131,000 is \$13,100.
- Reducing unequal offers by a common percentage will result in unequal treatment. If two offers are both reduced by 10 percent the larger number will receive a larger adjustment for the same BRCL achievement. If Offer #1 is reduced by 10 percent, the reduction will be \$13,100. If Offer #2 is reduced by 10 percent, the reduction will be \$13,400.

OFFEROR	BRCL?	OFFER	EVALUATED PRICE
1	Yes	\$131,000	\$131,000
2	No	\$120,000	\$132,000
3	No	\$122,000	\$134,200
4	Yes	\$134,000	\$134,000

Step 4: Make Award Decision

Award should be made to Offeror #1. The evaluated price of Offer #1 is \$131,000. The evaluated price of Offeror #2 is \$132,000. The evaluated prices of both of the other two offers are higher.

5.3.2 Vendor Rating Systems

Introduction/ Review

As stated in Chapter 4, Vendor Rating Systems (VRS) assign firms to one of several possible rating levels such as exceptional, acceptable, marginal, or unacceptable. The rating is then considered along with price in contractor selection.

General Evaluation Requirements

When evaluating possible award combinations (Step 3), consider the following:

The first VRS method described in Chapter 4 simply ranks offers based on the VRS rating.

- For example, if the system provided for ratings of exceptional, acceptable, marginal, and unacceptable, all the exceptional offers will be ranked above all the acceptable and lower rated offers.
- All offers with the same rating will be ranked by price. For example, the lowest priced exceptional rated offer would receive award over a higher priced exceptional rated offer.
- Buyers may be precluded from awarding to offerors with a marginal or unacceptable rating without special approval. Special approvals may be required for award to marginal or unacceptable offerors.
- To assure that price competition is maintained, there must be a limit established for quality rating preference. For example, the award price will not exceed the price of the low, responsible, responsive offer by more than 15 percent.

The second method of evaluation provides for consideration of the increasing costs of quality assurance. These costs are estimated for each possible quality assurance rating. Award would go to the offeror with the lowest evaluated offer, considering offered price plus estimated quality-related cost.

The third evaluation method uses the basic values of the VRS and evaluation plans tailored to specific requirements.

(Continued on next page)

5.3.2 Vendor Rating Systems (Continued)

Sample Evaluation

The sample evaluation will examine the use of the first VRS method described above. Offerors will be rated based on their VRS rating and on price. Award cannot be made at a price more than 15 percent higher than the price of the low, responsive, responsible offeror.

Step 1: Determine Solicitation Provisions

Assume that the solicitation included the following provision:

Award will be made to the firm whose offer provides the greatest value to the Government, price, quality, delivery, performance, and other factors considered. Both price and the offeror's Vendor Rating System (VRS) will be considered in offer evaluation. Award may be made to a firm with a higher priced, higher rated offer.

Step 2: Determine Total Bid/Offered Price

Four offers were received:

OFFEROR	VRS RATING	OFFER
1	Exceptional	\$142,000
2	Acceptable	\$123,000
3	Acceptable	\$122,000
4	Exceptional	\$139,000

(Continued on next page)

5.3.2 Vendor Rating Systems (Continued)

Sample
Evaluation
(Cont.)

Step 3: Evaluate Possible Award Combinations

Step 3A: Begin your evaluation of the offers by determining the low priced offeror. Offeror #3 is low at \$122,000.

Step 3B: If other offerors have a higher VRS Rating, determine the highest price that you could pay to purchase the item from a higher-rated firm. If the limit is a 15 percent premium, multiply the low offer by 1.15.

In this example, you would consider any higher rated offer with a price less than or equal to \$140,300 ($\$122,000 \times 1.15$).

Step 3C: Identify the highest VRS rated offers that have a price less than or equal to the highest price you could pay. If you identify more than one offer in that VRS rating category, further identify the lowest priced offer in the category.

In this example, only two offers have a higher rating, Offer #1 and Offer #4. Of the two, only Offer #4, \$139,000, is less than the maximum price that you can pay, \$140,300.

Step 4: Make Award Decision

Award to Offeror #4. Offeror #4 submitted the lowest offer in the Exceptional VRS rating, and it was within 15 percent of the low offeror.

5.3.3 Supplier Performance Index

Definition

The SPI is a factor that you can use to make an estimate of the true cost of a product to the Government, considering price and quality-related costs:

$$\text{SPI} = \frac{\text{Extended Purchase Price} + \text{Quality Related Costs}}{\text{Extended Purchase Price}}$$

General
Evaluation
Requirements

As described in Chapter 4, use of the Supplier Performance Index (SPI) depends on the calculation of a contractor SPI. The SPI can either be calculated for all products supplied by the firm or by Federal Stock Class (FSC). The SPI is not developed by the contracting office. Contracting should have an input on how the SPI is developed, but actual data must be supplied by personnel involved with product receipt and use.

Some provision must be made for the evaluation of the offers from firms that do not have an assigned SPI. One method is to assign an SPI equal to the average of all firms, or all firms in that FSC. Assignment of an average SPI will provide the firm with an opportunity to win the award. Evaluating such an offer without adjustment would be the same as assigning an SPI of 1.00. This is the same rating a firm with perfect quality would receive—an unfair advantage for a firm with which you have no experience.

Sample
Evaluation

Step 1: Determine Solicitation Provisions

Assume that the following provision from Chapter 4 was included in the solicitation:

Award will be made to the firm whose offer provides the greatest value to the Government, price, quality, delivery performance, and other factors considered. Price evaluation will be performed using the offeror's Supplier Performance Index (SPI) for the appropriate Federal Stock Class (FSC). If the offeror does not have an SPI assigned, the contracting officer will assign, for purposes of evaluation, an SPI equal to the average SPI of all firms in that FSC.

(Continued on next page)

5.3.3 Supplier Performance Index (Continued)

Sample
Evaluation
(Cont.)

Step 2: Determine Total Bid/Offered Price

Three offers have been received:

OFFEROR	SPI	OFFER
1	1.15	\$142,000
2	1.60	\$123,000
3	1.20	\$122,000

Step 3: Evaluate Possible Award Combinations

Given the offers and the SPI for each offeror, evaluation involves simply multiplying the offer by the offeror's SPI.

OFFEROR	SPI	OFFER	EVALUATED PRICE
1	1.15	\$142,000	\$156,400
2	1.60	\$123,000	\$198,400
3	1.20	\$122,000	\$156,000

Step 4: Make Award Decision

The lowest evaluated offer is \$156,000. Accordingly, award would go to Offeror #3.

SECTION D

5.4 APPLY GOVERNMENT FURNISHED PRODUCTION AND RESEARCH PROPERTY FACTORS

Overview

Introduction

In this section, the examination of general evaluation requirements, as well as a sample evaluation, is tailored to the unique requirements of each type of GFP factor evaluation.

In this section

As outlined in Chapter 4, two factors must be considered in the evaluation of offers involving Government furnished production and research property (GFP).

This section covers the following actions:

TOPIC	SEE PAGE
5.4.1 Eliminate Competitive Advantage	5-28
5.4.2 Consider Costs and Savings to the Government	5-31

5.4.1 Eliminate Competitive Advantage

Introduction

When the contracting officer determines that there are competitive sources and that one or more sources may have a competitive advantage due to possession of GFP, you must include provisions for evaluation of the competitive advantage in the solicitation.

General Evaluation Requirements

FAR 45.205

Step 1: Determine Solicitation Provisions

Follow the requirements of FAR 45.205 in developing provisions for evaluating competitive advantage. These must describe the evaluation procedures to be used, including the rental charges or equivalents to be evaluated, and information the offeror will be required to submit with the offer. The required offeror information submission must include:

- A list or description of all Government production or research property that the offeror (or subcontractors) proposes to use rent free.
- Identification of any facilities contracts which include the identified property.
- Date when property will be needed and concurrent use of the property on other contracts. Data will be used for the proration of rent or rent equivalents for offer evaluation purposes.
- The amount of property rental cost that would be charged if the GFP were not used.

Step 2: Determine Total Bid/Offered Price

When offers have been received, you must determine the total price offered for each item for each offeror. You must also identify what GFP each offeror is proposing to use on the contract and the estimated period of use.

Step 3: Evaluate Possible Award Combinations

Before you evaluate the pricing aspects of the use of GFP on the contract, contact the contracting officer responsible for administration of the GFP to confirm that the property is available for use on the contract.

(Continued on next page)

5.4.1 Eliminate Competitive Advantage (Continued)

General
Evaluation
Requirements

Step 3: Evaluate Possible Award Combinations (Cont.)

Follow the offer evaluation procedures set forth in the solicitation. The two general methods of evaluation are adjustments for evaluation purposes only, and charging contractor's rent. These are described in Chapter 4, and summarized as follows:

- If a rental equivalent factor is used, it must be equal to the rent allocable to the proposed contract that would have been charged for the GFP. Compute the rental factor using the terms of FAR 52.245-9, Use and Charges.
- If using the rental equivalent is not practical, and the competitive advantage is to be eliminated by charging rent, any offeror or subcontractor may use the GFP after obtaining written approval from the cognizant contracting officer. Rent in accordance with FAR 45.403 and 52.245-9 should be included in each offer.

FAR 52.245-9

FAR 45.403
FAR 52.245-9

Step 4: Make Award Decision

Whichever method you use, select the offer that provides the lowest evaluated price.

Sample
Evaluation

Step 1: Determine Solicitation Provisions

In this sample evaluation, you will adjust for GFP award purposes only. Assume that the following provision was included in the solicitation.

For purposes of offer evaluation, any offer predicated on rent-free use of Government Furnished Property (GFP) will be adjusted to eliminate possible competitive advantage. The adjustment will be made using a rental equipment adjustment factor equal to the allocable rent that would otherwise be charged for the GFP. Rent will be computed in accordance with FAR 52.245-9, Use and Charges.

FAR 52.245-9

(Continued on next page)

5.4.1 Eliminate Competitive Advantage (Continued)

Sample Evaluation

Step 2: Determine Total Bid/Offered Price

Two offers were received in response to the solicitation.

OFFEROR	OFFER
1	\$352,000
2	\$347,000

Only Offeror #2 proposed rent-free use of GFP. This proposal consisted of rent-free use of one APEX Model 5209, Ser #14345089 machine tool, for a period of one month during production.

Step 3: Evaluate Possible Award Combinations

You should contact the contracting officer responsible for the GFP to ensure that the proposed GFP will be available for use on your contract, as requested by the offeror.

FAR 52.245-9

Assume that the cognizant contracting officer further advises you that the equipment is less than two years old and cost \$200,000. Use the requirements of FAR 52.245-9 to determine that a fair and reasonable rental cost is \$6,000.

Using the \$6,000 in evaluation, you find:

OFFEROR	OFFER	GFP RENTAL EQUIVALENT	EVALUATED PRICE
1	\$352,000	---	\$352,000
2	\$347,000	\$6,000	\$353,000

Step 4: Make Award Decision

Based on the evaluation above, you should award to Offeror #1. This will result in the lowest evaluated price to the Government.

5.4.2 Consider Costs and Savings to the Government

Introduction

FAR 45.202-3

If furnishing GFP to a contractor will result in measurable savings or direct costs to the Government, you must consider additional factors when evaluating offers. The types of costs and savings that you should consider are outlined in FAR 45.202-3, Costs and Savings, and in Chapter 4.

General Evaluation Requirements

Step 1: Determine Solicitation Provisions

You must specify the dollar value of savings in the solicitation and use this data in the evaluation. You must specify direct costs as dollar values or as formulas.

You do not need to make any adjustment for costs that will be borne by the contractor. For example, if, under the terms of the solicitation, the contractor will bear the transportation cost of furnishing the GFP or the cost of making it suitable for use, you will not use additional evaluation factors related to those costs.

Step 2: Determine Total Bid/Offered Price

When offers have been received, you must determine the total price offered for each item for each offeror. You must also review each offer to determine whether it specifies use of the identified GFP.

Step 3: Evaluate Possible Award Combinations

In offer evaluation, you must identify the costs and savings in each offer related to GFP. Use the costs and savings specified in the solicitation.

Step 4: Make Award Decision

Make award to the firm whose offer has the lowest evaluated price. Include consideration of the costs and savings to the Government that result from the use of the Government production and research property.

(Continued on next page)

5.4.2 Consider Costs and Savings to the Government (Continued)

Sample Evaluation

Step 1: Determine Solicitation Provisions

Assume that the provision below was included in the solicitation. The amount of \$9,000 represents the cost of deactivating and placing the tools in storage and maintaining them there for the period of the contract. A complete list of tools is included in solicitation Paragraph L-XX.

In addition to any other proposal adjustments, \$9,000 will be deducted from any offers proposing to use the GFP identified in Solicitation Paragraph L-XX. The \$9,000 represents the costs that the Government will avoid if the identified GFP is not placed in storage.

Step 2: Determine Total Bid/Offered Price

Two offers have been received. Both offers propose use of the tooling described in solicitation Paragraph L-XX. Offer #1 includes the estimated costs of relocating the tooling from the plant of Offeror #2. Offer #2 does not propose relocation costs because the tooling is already located at that offeror's plant.

OFFEROR	OFFER
1	\$364,000
2	\$370,000

Step 3: Evaluate Possible Award Combinations

Both offers propose use of the tooling described in solicitation Paragraph L-XX. As a result, the \$9,000 savings identified in the solicitation will be deducted from the price offered by each of the offerors. Since the cost of relocating the tooling is included in Offer #1, no further adjustment is required.

5.4.2 Consider Costs and Savings to the Government (Continued)

Sample
Evaluation
(Cont.)

Step 3: Evaluate Possible Award Combinations (Cont.)

OFFEROR	OFFER	GOVERNMENT SAVINGS	OFFER EVALUATION
1	\$364,000	\$9,000	\$355,000
2	\$370,000	\$9,000	\$361,000

Step 4: Make Award Decision

In your evaluation, you should deduct \$9,000 from both offers. As a result, there would be no change in the dollar difference between the two offers. Award will be made to Offeror #1.

SECTION E

5.5 APPLY TRANSPORTATION COST FACTORS

Introduction

Whenever bids/offers are not submitted f.o.b. destination, transportation-related costs must be considered as part of bid/offer evaluation.

General Evaluation Requirements

FAR 47.304

Step 1: Determine Solicitation Provisions

You must determine general f.o.b. terms on the basis of overall costs, giving due consideration to the criteria presented in FAR 47.304.

You must specify in the solicitation whether, at their discretion, offerors must submit offers:

- f.o.b. origin
- f.o.b. destination
- both f.o.b. origin and f.o.b. destination
- either f.o.b. origin or f.o.b. destination.

The general advantages of both f.o.b. origin and f.o.b. destination terms are examined in Chapter 4 and FAR 47.304-1.

FAR 47.304-1

Specific solicitation requirements are addressed in:

- FAR 47.305-2, Solicitations F.O.B. Origin and F.O.B. Destination—Lowest Overall Cost
 - FAR 47.305-3, F.O.B. Origin Solicitations
 - FAR 47.305-4, F.O.B. Destination Solicitations
 - FAR 47.305-5, Destination Unknown
 - FAR 47.305-6, Shipments to Ports and Air Terminals
 - FAR 47.305-7, Quantity Analysis, Direct Delivery, and Reduction of Cross Hauling and Backhauling
 - FAR 47.305-8, Consolidation of Small Shipments and the Use of Stopoff Privileges
 - FAR 47.305-9, Commodity Description and Freight Classification
-

(Continued on next page)

5.5 Apply Transportation Cost Factors (Cont.)

General
Evaluation
Requirements

Step 1: Determine Solicitation Provisions (Cont.)

- FAR 47.305-10, Packing, Marking, and Consignment Instructions
- FAR 47.305-11, Options in Shipment and Delivery
- FAR 47.305-12, Delivery of Government-Furnished Property
- FAR 47.305-13, Transit Arrangements
- FAR 47.305-14, Mode of Transportation
- FAR 47.305-15, Loading Responsibilities of Contractors
- FAR 47.305-16, Shipping Characteristics

Standard delivery terms and related contract requirements are described in FAR 47.303.

- FAR 47.303-1, F.O.B. Origin
- FAR 47.303-2, F.O.B. Origin Contractor's Facility
- FAR 47.303-3, F.O.B. Origin, Freight Allowed
- FAR 47.303-4, F.O.B. Origin, Freight Prepaid
- FAR 47.303-5, F.O.B. Origin, With Differentials
- FAR 47.303-6, F.O.B. Destination
- FAR 47.303-7, F.O.B. Destination, Within Consignee's Premises
- FAR 47.303-8, F.A.S. Vessel, Port of Shipment
- FAR 47.303-9, F.O.B. Vessel, Port of Shipment
- FAR 47.303-10, F.O.B. Inland Carrier, Point of Exportation
- FAR 47.303-11, F.O.B. Inland Point of Importation
- FAR 47.303-12, Ex Dock, Pier, or Warehouse, Port of Importation
- FAR 47.303-13, C&F Destination
- FAR 47.303-14, C.I.F. Destination
- FAR 47.303-15, F.O.B. Designated Air Carrier's Terminal, Point of Exportation
- FAR 47.303-16, Designated Air Carrier's Terminal, Point of Importation
- FAR 47.303-17, Contractor-Prepaid Commercial Bills of Lading, Small Package Shipments

Step 2: Determine Total Bid/Offered Price

When offers have been received, you must determine the total price offered for each item for each offeror. You must also examine each offer to determine if it complies with the terms identified in the solicitation.

(Continued on next page)

5.5 Apply Transportation Cost Factors (Continued)

General
Evaluation
Requirements

FAR 47.306-2

Step 3: Evaluate Possible Award Combinations

Evaluate offers using the specific criteria set forth in the solicitation. In evaluating transportation costs, you must use the lowest available freight rates and related accessorial and incidental charges that are:

- In effect on, or become effective before, the expected date of initial shipment
- On file or published on the date of bid opening

If rates or related charges become available after the bid opening or the due date of offers, do not use them in evaluation unless they cover transportation for which no applicable rates were in effect at the time of bid opening or the due date of offers.

Step 4: Make Award Decision

Award to the firm whose offer provides the lowest evaluated price to the Government under the terms of the solicitation. Consider both price and allowable transportation cost in your price evaluation.

Sample
Evaluation

FAR 47.306-2

Step 1: Determine Solicitation Provisions

Assume that the following provision was inserted in the solicitation:

Award will be made f.o.b. destination or f.o.b. origin to the offeror with the lowest evaluated price. F.o.b. origin offers will be evaluated on the basis of unit price bids plus transportation cost to destination based on the most economical rates available to the Government, in accordance with FAR 47.306-2.

5.5 Apply Transportation Cost Factors (Continued)

Sample Evaluation

Step 2: Determine Total Bid/Offered Price

Three offers were received. One offered the item f.o.b. destination. The others offered the item f.o.b. origin.

OFFEROR	F.O.B. POINT	OFFER
1	Origin	\$435,000
2	Destination	\$450,000
3	Origin	\$436,000

Step 3: Evaluate Possible Award Combinations

FAR 47.306-2

From the cognizant transportation officer, obtain the lowest available transportation cost and incidental charges that are: (FAR 47.306-2)

- In effect on, or effective before, the expected date of initial shipment, AND
- On file or published on the date of the bid opening.

The specific shipping costs are shown below, for each offeror:

OFFEROR	F.O.B. POINT	OFFER	TRANSPORTATION COST	EVALUATED PRICE
1	Origin	\$435,000	\$2,600	\$437,600
2	Destination	\$450,000	N/A	\$450,000
3	Origin	\$436,000	\$1,500	\$437,500

Step 4: Make the Award

Make award to the offeror with the lowest evaluated price, Offeror #3.

SECTION F

5.6 APPLY ENERGY CONSERVATION AND EFFICIENCY FACTORS

Introduction

Whenever the results would be meaningful, practical, and consistent with agency programs and needs, you must apply energy criteria to price-related decisions.

General Evaluation Requirements

Step 1: Determine Solicitation Provisions

In applying energy criteria, you must consider energy use and efficiency labels on all covered products and energy efficiency standards as they become available.

Step 2: Determine Total Bid/Offered Price

When offers have been received, determine the total price offered for each item for each offeror. You must assure that the offer contains the information required by the solicitation to evaluate energy-related factors in price analysis.

Step 3: Evaluate Possible Award Combinations

Evaluate offers using the specific criteria established in the solicitation. Both price and energy-related costs must be considered in price evaluation.

Step 4: Make Award Decision

Award to the firm whose offer provides the lowest evaluated price to the Government under the terms of the solicitation.

(Continued on next page)

5.6 Apply Energy Conservation and Efficiency Factors (Continued)

Sample Evaluation

Step 1: Determine Solicitation Provisions

Assume that the following provision was included in the solicitation for 100 hot water heaters with 50 gallon capacity:

Award will be made to the firm whose offer will provide the lowest total cost of acquisition and ownership to the Government during the first year of operation, considering price and energy cost. Estimates of energy cost will be based on the Energy Use and Efficiency Label provided by the manufacturer under 42 U.S.C. 6296.

Step 2: Determine Total Bid/Offered Price

Two offers were received. The prices shown below are for 100 units. The one-year energy cost is the total for 100 units. Energy costs are based on estimates from the Energy Use and Efficiency Label figures provided by each offeror. Energy costs are calculated as follows:

$$\text{Energy Cost} = \frac{\text{Kilowatt Hours Used Per Hour of Operation}}{\text{Operation}} \times \text{Projected Hours of Operation} \times \frac{\text{Energy Cost Per Kilowatt Hour}}{\text{Hour}}$$

OFFEROR	OFFER	ENERGY COST
1	\$36,000	\$56,000
2	\$37,000	\$52,000

Step 3: Evaluate Possible Award Combinations

In accordance with the solicitation provision evaluate the offers by summing proposed price and energy cost for one year. Note that the energy cost for one year is greater than the price of the heaters.

OFFEROR	OFFER	ENERGY COST	EVALUATED PRICE
1	\$36,000	\$56,000	\$92,000
2	\$37,000	\$52,000	\$89,000

(Continued on next page)

i5.6 Apply Energy Conservation and Efficiency Factors (Continued)

Sample
Evaluation
(Cont.)

Step 4: Make Award Decision

Make award to the offeror with the lowest evaluated price, including consideration of energy-related costs. In this case, Offeror #2 wins the award.

SECTION G

5.7 CONSIDER LEASE VS. PURCHASE

Introduction

FAR 7.401

In developing specific provisions, consider the importance of the types of cost identified in Chapter 4 and in FAR 7.401.

General
Evaluation
Requirements

Step 1: Determine Solicitation Provisions

Define in the solicitation what costs you will consider in the award and how you will consider these costs. For example:

- Will you adjust a flow of expenditures over time for an imputed (assumed) cost of money?
- Will you adjust expenditures to consider the probability of incurrence?

Step 2: Determine Total Bid/Offered Price

When offers have been received, you must assure that all required data is included in each offer.

Step 3: Evaluate Possible Award Combinations

Evaluate offers using the specific criteria established in the solicitation.

Step 4: Make the Award

Award to the firm whose offer provides the lowest evaluated price to the Government under the terms of the solicitation.

Step 1: Determine Solicitation Provisions

You have a requirement for material handling equipment. The present facility will close in 24 months and the equipment will be removed from use at that time. Purchased equipment will be sold at auction. Rental equipment will be returned to the vendor. Because of the limited period of use, you are soliciting offers for lease as well as for purchase.

(Continued on next page)

5.7 Consider Lease vs. Purchase (Continued)

Sample Evaluation

Step 1: Determine Solicitation Provisions

Assume that the following provision was included in the solicitation:

The Government will acquire the equipment identified in Section B by either lease or purchase. The method of acquisition and the successful offeror will be determined based on the lowest discounted total cost to the Government for acquisition and disappointing. Operation and maintenance costs will not be considered in offer evaluation.

Step 2: Determine Total Bid/Offered Price

Offers were received from two firms. One offer was based on Government purchase of the item, the other on Government lease. The proposed lease is for a two-year period.

OFFEROR	GOVERNMENT PURCHASE	GOVERNMENT 2-YEAR LEASE
1	\$46,000	N/A
2	N/A	\$20,500/YR*

* The lease payment is due at the beginning of each year.

Step 3: Evaluate Possible Award Combinations

The solicitation provision states that "the method of acquisition and the successful offeror will be determined based on the lowest discounted total cost to the Government for acquisition and disposition."

To evaluate the cost to the Government, you must consider all of the relevant costs and receipts that would result from purchase or lease of the equipment.

(Continued on next page)

5.7 Consider Lease vs. Purchase (Continued)

Sample Evaluation (Cont.)

Step 3: Evaluate Possible Award Combinations (Cont.)

For the purchase, there would be an expenditure of \$46,000 at the beginning of Year 1 to purchase the equipment. There would also be a receipt at the end of Year 2 when the equipment is sold at auction. Your best estimate of the sale value is \$6,000.

For the lease, there would be an expenditure at the beginning of Year 1 for the first 12-month lease cost. There would be a second expenditure at the end of Year 1 for the second 12-month lease cost. There would be no receipt or expense at the end of Year 2.

OFFEROR	GOVERNMENT EXPENDITURE BEGINNING OF YEAR 1	GOVERNMENT EXPENDITURE END OF YEAR 1	GOVERNMENT RECEIPT END OF YEAR 2
1 Purchase	\$46,000	N/A	\$6,000
2 Lease	\$20,500	\$20,500	N/A

As stated in the solicitation provision, expenditures and receipts must be "discounted." In terms of your analysis, discounting refers to adjustment for the net present value of a dollar expenditure or receipt at a later time.

- A dollar spent at the beginning of Year 1 would not be adjusted.
- If you assume that the Government must borrow money to make an expenditure, you can save a year's interest by deferring the expenditure until the end of the year. If the interest rate is 10 percent, the net present value of a dollar to be spent or received at the end of Year 1 is \$.90909 ($\$1/1.10^1$).

At the same interest rate, the net present value of a dollar to be spent or received at the end of Year 2 is \$.82645 ($\$1/1.10^2$).

(Continued on next page)

5.7 Consider Lease vs. Purchase (Continued)

Sample Evaluation (Cont.)

Step 3: Evaluate Possible Award Combinations (Cont.)

Using the established values for net present value at the end of one year and at the end of two years, the net present value of the purchase and lease options would be:

OFFEROR	GOVT EXPENDITURE BEGINNING OF YEAR 1	GOVT EXPENDITURE END OF YEAR 1	GOVERNMENT RECEIPT END OF YEAR 2	EVALUATED COST TO THE GOVERNMENT
1 Purchase	\$46,000	N/A	\$4,959 (\$6,000 x .82645)	\$41,041
2 Lease	\$20,500	\$18,636 (\$20,500 x .90909)	N/A	\$39,136

Step 4: Make Award Decision

Make award to the offeror with the lowest evaluated cost to the Government, Offeror #2.

Purchase Widgets (Cont.)

After reading Section 5.3.1, you decide to follow the four-step procedure provided:

- Step 1: Determine Solicitation Provisions*
- Step 2: Determine Bid/Offered Price*
- Step 3: Evaluate Possible Award Combinations*
- Step 4: Make Award Decision*

Step 1: Determine Solicitation Provisions

Remember, your evaluation will be based on the following award criteria contained in the solicitation.

"Based on demonstrated dependable quality and delivery performance, as evidenced by membership on the agency's Blue Ribbon Contract List (BRCL), the contracting officer may award to an offeror at a price up to 10 percent higher than a lower offer who is not on the BRCL."

Step 2: Determine Bid/Offered Price

You have received four responsive offers from responsible firms. Two are from offerors on the BRCL.

<i>OFFEROR</i>	<i>BRCL?</i>	<i>OFFER</i>
<i>1</i>	<i>No</i>	<i>\$178,000</i>
<i>2</i>	<i>No</i>	<i>\$176,800</i>
<i>3</i>	<i>Yes</i>	<i>\$190,120</i>
<i>4</i>	<i>Yes</i>	<i>\$195,600</i>

Step 3: Evaluate Possible Award Combinations

<i>OFFEROR</i>	<i>BRCL?</i>	<i>OFFER</i>	<i>EVALUATED PRICE</i>
<i>1</i>	<i>No</i>	<i>\$178,000</i>	<i>\$195,800</i>
<i>2</i>	<i>No</i>	<i>\$176,800</i>	<i>\$194,480</i>
<i>3</i>	<i>Yes</i>	<i>\$190,120</i>	<i>\$190,120</i>
<i>4</i>	<i>Yes</i>	<i>\$195,600</i>	<i>\$195,600</i>

Step 4: Make Award Decision

Using the evaluated prices, you tentatively select the offer with the lowest evaluated price for award. It appears that award to Offeror #3 is most advantageous to the Government. However, you want to assure yourself that the price is reasonable before you make the final award decision, because the price is \$8,820 higher than your preliminary price estimates.

CHAPTER 6

COMPARE PRICES

Learning Objectives

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective 6/1

Identify steps in making price comparisons.

- Select Prices for Comparison
- Identify Factors that Affect Comparability
- Determine the Effect of the Factors Identified
- Adjust the Prices Selected for Comparison
- Compare Adjusted Prices to the Offer in Line for Award

Classroom Learning Objective 6/2

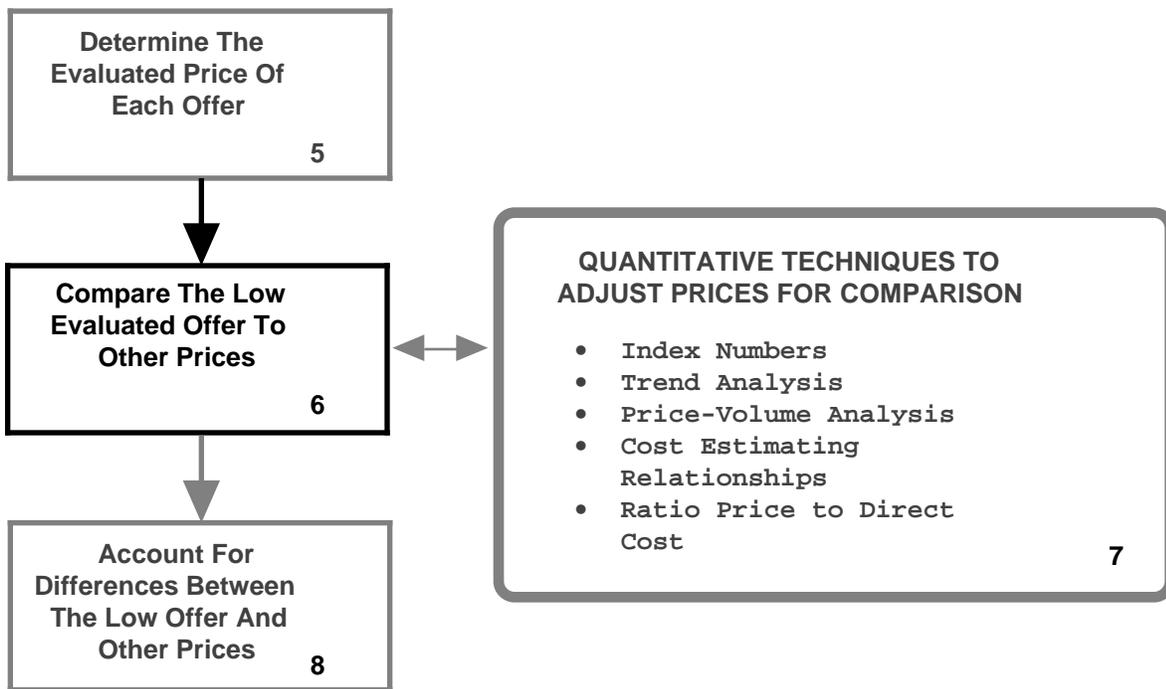
Compare the low offer to:

- Competitive Prices
 - Commercial Prices
 - Historical Prices
 - Pricing Yardsticks and Cost Estimating Relationships
 - Government Estimates
-

Procedural Steps

Procedural Steps The following figure shows where this chapter fits into the conduct of a price analysis.

**STEPS IN ANALYZING PRICES
(Chapters 5 - 8)**



Chapter Overview

Introduction

In the Introduction, you learned that **price analysis**:

- is the process of examining and evaluating a proposed price to determine if it is fair and reasonable without evaluating its separate cost elements and proposed profit
- **always** involves some form of comparison with other prices.

This Chapter

In this chapter, you will learn how to make price comparisons.

SECTION	DESCRIPTION	SEE PAGE
A	6.1 Make Comparisons	6-7
	6.1.1 Select Prices for Comparison	6-11
	6.1.2 Identify Factors that Affect Comparability	6-12
	6.1.3 Determine the Effect of the Factors Identified	6-16
	6.1.4 Adjust the Prices Selected for Comparison	6-17
	6.1.5 Compare Adjusted Prices to the Offer in Line for Award	6-18
B	6.2 Types of Comparisons	6-21
	6.2.1 Use Competitive Prices	6-24
	6.2.2 Use Commercial Prices	6-31
	6.2.3 Use Historical Prices	6-37
	6.2.4 Use Pricing Yardsticks	6-41
	6.2.5 Use Government Estimates	6-46

(Continued on next page)

Chapter Overview (Continued)

Bases and Depth
of Price Analysis

In a given procurement, the comparison bases that you select, and the depth of price analysis you perform, depends on the dollars involved.

FAR 13.106(a)(4)

For purchases not over \$2,500 (or 10% of the small purchase threshold):

You are only required to solicit one quote, if you have other evidence that the quoted price is reasonable. Such evidence might include:

- Prices paid recently by other contracting officers.
- Published prices in catalogs, newspaper ads, and other such sources available in your office.

Absent such evidence, solicit quotes by phone or fax from other vendors.

FAR 13.106(c)

For purchases of more than \$2,500, but not more than \$25,000 (or over 10% but not more than 100% of the small purchase threshold):

You must solicit quotes from three or more vendors, unless you determine that only one source is reasonably available. Double check quoted prices¹ against pricing data readily available within your organization, including:

- Prices paid recently by contracting officers in your activity, and
 - Published prices in catalogs, newspapers ads, and other such sources available in your activity.
-

(Continued on next page)

¹ The FAR does not require you to do more than solicit competitive quotes as a basis for establishing price reasonableness. However, that fact will not be of much comfort if an Inspector General (IG) finds that you paid \$3,000 for an item that was awarded by another contracting officer in your activity at a price of \$1,500 one month prior to your award.

Chapter Overview (Continued)

Bases and Depth
of Price Analysis
(Cont.)

You may need to expand the scope and scale of the price analysis if any of the following are true:

- Only one or two firms quoted.
- Quoted prices vary significantly from one another (i.e., "reflect a lack of adequate competition.")
- Quoted prices are significantly out of line with pricing data available in your activity.
- You have no data for comparison other than the quotes.

In such situations, you may need to make some additional comparisons, described in Section 6.1.

FAR 14.407-2
FAR 15.805-2

For contracts over the small purchase threshold, determine price reasonableness by making the comparisons described in Section 6.1.

Purchase Widgets (Cont.)

You have tentatively selected a firm for contract award, but you must be sure that the price of the apparent successful offer is fair and reasonable. To make that decision, you must understand the comparison process.

Chapter 6 will outline the comparison process and examine specific steps in price analysis using different comparison bases.

SECTION A

6.1 MAKE COMPARISONS

Overview

Purpose

Compare prices to determine whether the low offer¹ is “fair and reasonable” — in terms of being at or near the “should-pay” price.

Definition - “Should-Pay Price”

The “should-pay” price is the price that, in your best judgement, the Government should reasonably expect to pay for the deliverable based on the offers, historical prices (if any), commercial prices (if any), yardsticks (if any), and Government estimates (if any). It can be viewed as an update of the preliminary price estimate from Chapter 1. As a minimum, use data collected for the purposes of Chapter 1 (e.g., from the Purchase Request, contract files, and market research) in analyzing prices and estimating the should-pay price.

Bear in mind that your “should pay” price is an **estimate**. Being an estimate, it is by definition inexact. If you have done a good job of price analysis, your “should pay” price will probably be close to the mark. Still, don't be dogmatic about your estimate — to the point of rejecting offers that are close to, but not exactly at, your “should pay” estimate of the price.

If the low offer is significantly higher or lower than your estimate:

- Determine **WHY** there is a significant variance between the should-pay price and that offer (Chapter 8), and then
 - Make the critical price related decisions in awarding contracts through sealed bidding (Chapter 9) or negotiations (Chapter 10).
-

Definition - Comparability

Comparability is the quality or state of being comparable. Comparable, in turn, means capable of, or suitable for, comparison. Comparison is examination of two or more items to establish similarities and dissimilarities.

Do two products have to be alike to be comparable? No. Any two things can be compared, but the comparison may show that they have no characteristics in common. Thus, if your purpose is to pass judgment on the price of at least one of the two, the comparison will have been a waste of time if they are unlike in every way.

(Continued on next page)

¹ The offer with the lowest evaluated price, after applying the solicitation's price-related factors per Chapter 5. For this discussion, assume the low offer is responsive (or within the competitive range) and from a responsible offeror.

Overview (Continued)

Definition -
Comparability
(Cont.)

For price analysis, then, a working definition of comparable is having enough similar characteristics or qualities to make comparison useful. For example, you can compare the prices of apples and oranges, but it won't be much help unless either fruit will satisfy the need at hand and size, kind, and quality are immaterial. If only large apples will do, it might be helpful to know the prices of Jonathan, Macintosh, and Golden Delicious apples—large size only, of course. If only Jonathans will suffice, the comparability problem is still not solved.

The more similar the items are, the easier the comparison. If your examination discloses significant dissimilarities, you may need to quantify the dissimilarities and make adjustments before you can reach valid conclusions about one price against another. The more judgmental the quantification, the greater the possibility for doubts about the conclusions, and the less likely that the comparison will be persuasive.

To summarize, comparisons will be controlled by what you are buying (the specifications and statement of work) and the similarities that exist in products or services being compared. The products or services must have some similar qualities or characteristics for the comparison to be useful.

Basic Steps

Follow the steps in the table below as you make price comparisons:

STEPS	ACTION	QUESTIONS TO CONSIDER
1	Select prices for comparison: <ul style="list-style-type: none"> • Competitive prices • Commercial prices • Historical prices • Price estimates based on pricing relationships (e.g., "yardsticks") • Government estimates 	Would this comparison be valid? Are more comparable prices available?

(Table continued on next page)

Overview (Continued)

Basic Steps

Table of basic steps continued.

STEPS	ACTION	QUESTIONS TO CONSIDER
2	Identify factors that affect comparability.	Have I considered all potentially significant factors, including differences in — <ul style="list-style-type: none"> • Market conditions • Quantity or size • Geographic location • Purchasing power of the dollar • Extent of competition • Technology • Terms and conditions (e.g., differences in features or capabilities; delivery leadtimes; one-time costs, etc.)
3	Determine the potential impact of these factors on prices selected for comparison. ¹	How substantial is the impact? In view of these factors and their impact: <ul style="list-style-type: none"> • Would the contemplated comparison have any credibility? • How much weight should I place on each price vis-a-vis other comparable prices?
4	Adjust prices selected for comparison. ²	Have I accounted for all factors that can be dollarized? What techniques should be applied in making the adjustment? How much reliance can I place on the resulting estimate?
5	Compare adjusted prices to the offer in line for award.	If the adjusted prices differ substantially from the low offer, what price should the Government reasonably expect to pay? What accounts for differences between this "should-pay" price and the offer in line for award? ³

¹ In Chapters 4 and 5, you selected price-related factors for the solicitation and applied those factors in adjusting the offered prices for comparison with one another.

² See Chapter 7 for estimating techniques.

³ See Chapter 8 on accounting for discrepancies between "Should-Pay" and offered prices.

Overview (Continued)

In this Section

This section covers the following topics:

TOPIC	SEE PAGE
6.1.1 Select Prices for Comparison	6-11
6.1.2 Identify Factors that Affect Comparability	6-12
6.1.3 Determine the Effect of the Factors Identified	6-16
6.1.4 Adjust the Prices Selected for Comparison	6-17
6.1.5 Compare Adjusted Prices to the Offer in Line for Award	6-18

6.1.1 Select Prices for Comparison

Five General
Types of
Comparison

FAR 15.805-2

FAR 15.805-2 identifies five general types of comparison that can be used in price analysis.

- Comparison of prices offered in response to the solicitation.
- Comparison with commercial prices, including:
 - Catalog prices
 - Market prices
 - Regulated prices
- Comparison of prior prices offered and prior contract prices with the current prices for the same or similar end items. Historical prices can include prices paid by buyers in other contracting activities—including buyers in non Federal entities.
- Application of rough pricing yardsticks (such as dollars per pound or dollars per horsepower) to highlight significant inconsistencies that warrant additional pricing inquiry.
- Comparison of offered prices with independent Government estimates.

Each of the above types of comparison will be addressed in Section 6.2.

6.1.2 Identify Factors that Affect Comparability

Introduction

Both internal and external factors affect the suitability of prices for comparison. These are:

- Market Conditions
 - Quantity or size
 - Geographic location
 - Purchasing power of the dollar
 - Extent of competition
 - Technology
 - Special terms and conditions
-

Market Conditions

Market conditions change. The passage of time usually is accompanied by changes in supply, demand, technology, product designs, pricing strategies, laws and regulations that affect supplier costs, and other such factors. An effort to equate two prices, separated by five years, through a simple inflation adjustment may not be successful. Too many characteristics of the market are likely to have changed. Do not stretch data beyond their limits.

Generally select the most recent prices available. The greater the time difference, the greater the likelihood and impact of differences in market conditions. If you are comparing a current offer with a prior price, the ideal comparable would be a contract price agreed to yesterday. That comparison would limit the effects of time on market conditions.

However, do not select prices for comparison merely on the basis of recency. Look instead for prices that were established under similar market conditions. For instance, if you are buying potatoes in October, offers from the previous October may be more comparable to current offers than prices paid last February, given the cyclical pattern of supply and demand in the market for potatoes.

Obtain the most current available data on trends and patterns in market conditions. Lags often occur between data collection and contract award. Changes in market conditions over that period can reduce the usefulness of the data assembled.

(Continued on next page)

6.1.2 Identify Factors that Affect Comparability (Continued)

Quantity or Size

Variations in quantity can have a significant impact on unit price, although the specific effect may not be obvious. Variations in quantity can have an upward effect, a downward effect, or no effect at all. For example, in the commodities area, it usually is assumed that larger purchases command lower prices. Where economies of scale are involved, that should be the case. However, increases in lot size beyond a point may tax a supplier's capacity and result in higher prices.

Also, market forces may impose opportunity costs on a supplier which result in higher unit costs for greater volumes. For example, if the price of oil is expected to increase 20 percent over a 12-month period, a supplier may choose to withhold a portion for a sale at a later date when the price is higher. In such a market, the effect of purchase quantity on price may not be as expected; at some point, increases in volume will result in higher unit prices as the supply of the lower priced oil is exhausted. Finally, if a price comparison is based on standard commercial items that are produced at a regular rate, variations in quantity may have no effect at all.

A meaningful comparison of prices requires that the effect of volume on price be accounted for. The best way to do this is to select prices for comparison based on equal volumes. If that is not possible, examine the specific suppliers and the nature of the market at the time of the purchase.

In the service area, the problems are different. Variations in size can sometimes be neutralized by reducing the comparison to price per square foot or price per productive labor hour. Because these approaches are not always effective, try to factor out size or quantity variations as much as possible. If you don't succeed, the price comparison will have little value.

(Continued on next page)

6.1.2 Identify Factors that Affect Comparability (Continued)

Geographic
Location

Geography can have a range of effects on comparability. In major metropolitan centers, buyers generally will be able to rely on data from within that geographic region; in more remote, less urban areas, the buyer must often get data from beyond the immediate area. Prices for many nationally advertised products will not vary much from place to place. Nevertheless, because geographic location can undermine comparability, you should first try to evaluate prices against prices obtained from the same area.

When you must compare prices across geographic boundaries, take the following steps:

1. Check the extent of competition, which can vary from place to place.
2. Determine the extent to which variations in the price of labor must be neutralized if comparison is to be valid.
3. Check freight requirements and accompanying costs. These can vary considerably, especially for hazardous materials like chemicals.
4. Identify geographic anomalies or trends. For example, many items are more expensive on the West Coast than in the East.

Purchasing
Power of the
Dollar

Inflation undermines comparability by eroding the real value of money. Because prices over time are expressed in the same denominations (dollars and cents), the denominations must have comparable values if comparison is to be meaningful.

Extent of
Competition

When comparing one price with another, assess the competitive environment shaping the prices. For example, you can compare last year's competitive price with a current offer for the same item. However, if last year's procurement was made without competition, you may not have a good price with which to compare the current offer. A poorly written specification and an urgent need combined to make competition impossible last year, but now the specifications have been rewritten and the delivery is not urgent. Given these circumstances, a current offer could be the same as, or less than, the past price and still not be reasonable.

(Continued on next page)

6.1.2 Identify Factors that Affect Comparability (Continued)

Technology

Prices from dying industries can rise because the technologies don't keep pace with rising costs. Conversely, technological advances in growth industries can drive prices down. The computer industry is an example. Technological advances have been made so fast that a comparison of prices separated by a single year must account for these advances if the comparison is to have any value.

Engineering or design changes must also be taken into account. This means you must identify the new or modified features and estimate their effect on price.

Special Terms and Conditions

Often, the Government's specifications vary to some degree from that for the commercial counterparts. The question is the impact these variations have on price. For example, the Government may require that the carpet in a landing craft be fireproof to a far greater extent than any commercial carpet. That may justify a difference in price as high as \$60 a yard over otherwise comparable commercial carpets.

In addition, Government contracting officers must often include contract clauses in that are not required in the usual market transactions. For example, contracts between buyers and sellers in the private sector do not include provisions relating to the Davis-Bacon Act, the Service Contract Act, clean air and water, and many other special conditions. Consequently, evaluation of an offer with commercial prices may be difficult. Unique terms and conditions affect prices, but it is extremely difficult to assign a dollar value to their effects.

6.1.3 Determine the Effect of the Factors Identified

Introduction

Once you have identified the factors that may affect comparability, you must determine the effect on the comparison with the offered price.

Determine Effect on the Comparison

The two key decisions are:

- Whether to pursue the contemplated comparison or drop it.
 - Does the comparison have validity?
 - Does the comparison, even with its limitations, contribute to the price analysis?
 - What weight to place on each price comparison, when making your final pricing decision.
 - Which comparisons have the greatest validity?
 - Which comparisons have the least validity?
-

6.1.4 Adjust the Prices Selected for Comparison

Introduction

If you have the option, obtain prices that are already comparable. If you cannot do that, try to establish comparability by making adjustments. You may have to use statistical techniques or algebraic formulas to establish a common basis for comparison.

Establish Comparability

You must complete two basic tasks in order to establish comparability:

1. Identify and document price-related differences, taking into account the factors affecting comparability.
2. Factor out price-related differences.

Restoring comparability by establishing a common basis for comparison requires that you assign a dollar value to each identified difference. However, you cannot always do this. The cost of terms and conditions peculiar to Government contracts is hard to estimate, so exercise discretion in such cases.

Note that Chapter 7 presents a number of quantitative techniques for adjusting prices and estimating "should-pay" prices.

6.1.5 Compare Adjusted Prices to the Offer in Line for Award

Compare
Adjusted Prices
to the Offer in
Line for Award

After you adjust prices for comparison, there may be sizeable differences between those prices and the low offer(s). Reasons for such differences will be examined in Chapter 8. In Chapter 9 you will learn how to use your analysis of those differences in making pricing-related decisions in sealed bidding. Chapter 10 presents similar material for making the pricing-related decisions in negotiations.

Purchase Widgets (Cont.)

Now that you have reviewed the comparison process, you are familiar with the five steps of any price analysis comparison:

Step 1: Select prices for comparison.

Step 2: Identify factors that affect comparability.

Step 3: Determine the potential impact of identified factors on price analysis comparisons.

Step 4: Adjust prices selected for comparison.

Step 5: Compare adjusted prices to the offer in line for award.

To apply the process, you must identify the bases of price analysis available to you in each situation. The number of bases that you consider will depend on the information available and the dollar value of the procurement.

SECTION B

6.2 TYPES OF COMPARISONS

Overview

Introduction

As you prepare to perform a price analysis, you will be faced with two related questions:

- What types of comparisons should you make?
- What information is available to support the price analysis decision?

The types of comparisons that you make depend mostly on the available data. For instance, if you have data on historical prices and have reason to believe that these data reflect good prior decisions on price reasonableness, then compare the low offer to historical prices. If you have no historical data (or have reason to believe that the historical prices were not reasonable), then give little or no weight to historical prices as a basis for comparison.

Contracts Over \$100,000

In addition, the types of comparisons you make are also a function of the issues to be decided. If the proposed contract is over the \$100,000¹ threshold, there are two basic issues:

1. Is the offeror (following receipt of offers) still entitled to an exemption to requirements for submission of Certified Current Cost and Pricing Data?
 2. Is the offer in line for award fair and reasonable?
-

(Continued on next page)

¹\$500,000 for DoD, NASA, and the Coast Guard, for contracts awarded after December 5, 1990.

Overview (Continued)

Contracts Over
\$100,000 (Cont.)

FAR 15.804-
3(b)(2)(iii)

FAR 15.804-
3(c)(8)

The two issues are separate but related. For example, if the price cannot be determined to be fair and reasonable through use of price analysis, the FAR generally provides that the offer is not exempt from requirements for submission of Certified Current Cost or Pricing Data (if the contracting officer determines that it is appropriate to negotiate with the offeror).

In this Section

Normally, make those types of comparisons for which data are reasonably available. In this section, you will learn about the the major comparison bases, presented in the general order of their desirability as a base for comparison:

TOPIC	SEE PAGE
6.2.1 Use Competitive Prices	6-24
6.2.2 Use Commercial Prices	6-31
6.2.3 Use Historical Prices	6-37
6.2.4 Use Pricing Yardsticks	6-41
6.2.5 Use Government Estimates	6-46

Purchase Widgets (Cont.)

You already used competition as a base for price analysis when you tentatively selected Offeror #3 for contract award. Now you must review the comparison process to assure that you can rely on the results of your analysis.

6.2.1 Use Competitive Prices

Introduction

To use competitive prices as a base for determining price reasonableness, first determine that you have competitive prices, and then use these prices to make the appropriate price comparisons. The following steps show you how to use competitive prices as a base for price analysis.

Selecting Prices For Comparison (Cont.)

Step 1. Select Prices for Comparison

Step 1A. Select offers for the price comparison.

Not all offers are eligible for price competition. In sealed bidding, you may not consider nonresponsive bids. In competitive negotiations, you may not consider proposals that are technically outside of the competitive range. Regardless of the method of procurement, you must reject offers from nonresponsible firms.

Step 1B. Determine if price competition still exists.

Having rejected nonresponsive offers and offers from nonresponsible firms, do you still have price competition? In Chapter 3, you learned that you can **GENERALLY ASSUME THAT PRICE COMPETITION EXISTS** when you can answer **YES** to **ALL** of the following questions:

- Are there two or more offerors?
 - Are there two or more offerors responsive to the terms of the solicitation?
 - Are the two or more responsive offers from responsible firms?
 - Are the offerors competing independently?
 - Will award be made to the offeror with the lowest evaluated price?
-

(Continued on next page)

6.2.1 Use Competitive Prices (Continued)

Selecting Prices
For Comparison
(Cont.)

Use the following decision table, (from Chapter 3), as a guide when answering the questions listed above. As a minimum, you must obtain enough data to assure yourself that the offerors are responsive and responsible, and that they are competing independently for contract award.

FAR 6.301(c)

IF...	THEN....
There is only one offer.	Price competition does not exist.
There is only one responsive* offer from a responsible offeror.	Price competition does not exist.
The offerors did not compete independently (e.g., were collusive).	Price competition does not exist.
Only one brand name or part number is acceptable.	Price competition does not exist no matter how many offers are received. Offers cannot be independent, because all depend on the same manufacturer.
Offers all come from different divisions of the same corporation.	Price competition does not exist. Offers are not independent.
Award will be made based on greatest value, considering <u>both</u> price-related <u>and</u> technical ranking factors.	Price competition exists only if price is a substantial evaluation factor.
Award will be made based solely on technical ranking factors.	Price competition does not exist.

* For example, when only one proposal is technically within the competitive range.

(Continued on next page)

6.2.1 Use Competitive Prices (Continued)

Selecting Prices
For Comparison
(Cont.)

FAR 15.804-3
(b)(2)

Step 1C. Determine the “adequacy” of the price competition.

In negotiated procurements, price competition must be “adequate” to exempt an offeror from the requirement for certified cost or pricing data. Even when that requirement is not at issue (e.g., when contracting under the dollar threshold for such data), you should still place little or no weight on price competition that is not adequate. Price competition is not adequate if any of the following is true.

- The solicitation was made under conditions that unreasonably denied one or more known and qualified offerors an opportunity to compete.
- The low offeror has such a decided advantage that it is practically immune from competition.
- Other price comparisons (or a cost realism analysis) show that the low offer is unreasonable.*

Some indicators that offerors were unreasonably denied an opportunity to compete:

- *The solicitation restricted competition to a particular brand.*

Price competition cannot be considered adequate if a brand-name purchase description was used or if the cited brand alone satisfies the “salient characteristics” of a brand-name-or-equal purchase description. If acceptable alternatives are available, you can deal with the problem by revising the purchase description.

- *The solicitation restricted competition to an item with one or more unique features.*

If only one manufacturer's products include those features, then price competition cannot be considered adequate. If the feature is essential, use other means to determine price reasonableness. If it is not essential, eliminate it from the specification.

- *The solicitation restricted competition to items that are compatible with an item that has unique features.*

Requiring compatibility with a product that has unique features has the same result as requiring the product itself.

(Continued on next page)

* When this is the reason for not exempting an offeror from the requirement for certified cost and pricing data, prepare a statement of facts for approval at a level above the contracting officer.

6.2.1 Use Competitive Prices (Continued)

Selecting Prices
For Comparison
(Cont.)

Some indicators of a possible unfair competitive advantage:

- *Do competitors or independent market analysts allege that a firm has an unfair market advantage?*

Firms are very sensitive to situations that give, or appear to give, an unfair market advantage to their competition. If such allegations are made, formally or informally, investigate to assure that no unfair advantage exists.

- *Does one firm always win the competition?*

If competitors are truly competitive, you would expect that no one firm would always submit the best offer. Other competitors should win occasionally.

- *Is one offeror's price substantially lower than the other competitors' prices?*

If you have one price that is significantly lower than the competition, it does not necessarily mean that the low offeror has a competitive advantage. However, it does raise questions.

- *Does the firm have a disproportionate market share?*

A disproportionate market share may indicate that the firm has significant economies of scale or other market advantages that permit the firm to control the competition.

Investigating the possibility of an unfair competitive edge.

Collect and analyze data about the individual offerors and their products. The following are among the key questions:

- *Does the low offeror have an edge in production technology?*

The low offeror may have patented a key production technology that is unavailable to competitors or available only at a much higher cost. If such a situation exists, consider purchasing rights to the production technology for use by all competitors.

- *Does the low offeror have a significant edge in tooling?*

If special tooling is required to produce the product, one firm may have existing tooling that is unavailable to competitors or available only at significantly higher cost. If such an advantage exists, consider providing Government-furnished tooling.

(Continued on next page)

6.2.1 Use Competitive Prices (Continued)

Selecting Prices For Comparison (Cont.)

- *Does the low offeror control a key component?*

When a firm controls a key component, it can influence the prices of its competitors. The greater the percentage of the selling price represented by that component, the greater the firm's control over market prices. If such an advantage exists, consider providing the component as Government-furnished material.

When they enjoy an “unfair” competitive advantage, firms often peg their prices to the prices of their less fortunate rivals rather than to their costs. Thus, a firm might keep its price 20% below published prices of competitors, even though it could make a reasonable profit at half that price. In such cases, cost analysis may be necessary to help verify price reasonableness.

Factors That Affect Comparability

Step 2: Identify factors that affect comparability.

In Step 1, you selected offers for comparison and determined whether comparing those offers would have any validity in determining price reasonableness. Assuming the answer is yes, you must now identify any factors that affect the comparability of competitive prices.

In sealed bidding, you must apply all price-related factors stated in the IFB, and no others. In competitive negotiations, you must consider the RFP's stated price-related factors and also the potential impact on price comparisons of the following:

- Changes in the RFP's requirements proposed by offerors,
 - The type of specification, and
 - The type of competition (i.e., “greatest value” or “lowest price, technically acceptable”).
-

Impact of the Factors

Step 3: Determine the potential impact of these factors on competitive prices.

In sealed bidding, all bids are priced against the same terms and conditions and evaluated by the same price-related factors.

Comparing proposals may not be as simple as comparing bids, when:

FAR 15.606

- The offer in line for award departs from the RFP's stated requirements. In that case, provide all offerors an opportunity to submit new or amended proposals against the revised requirements (but see the caveats in FAR 15.606(c)).
 - Offers differ in their basic approaches to meeting performance or functional specifications.
-

(Continued on next page)

6.2.1 Use Competitive Prices (Continued)

Impact of the Factors (Cont.)

-
- Technical proposals in “greatest value” competitions differ in promised capabilities and performance. In such competitions, you must analyze the reasonableness of the proposed price differentials for different technical configurations.
-

Adjusting Prices

Step 4: Adjust prices selected for comparison.

Apply price-related factors, as described in Chapter 5, to adjust the offered prices for comparison with one another.

Comparing Prices

Step 5: Compare adjusted prices to the low offer.

Comparing offers is the easiest form of price analysis. It also tends to be the most valid form of price analysis, because you are comparing offers prepared for the same requirement under the same market conditions. However, the weight placed on this type of comparison depends on the circumstances of the acquisition. Place less weight on competitive prices (relative to other types of price comparisons) when:

- Price competition does not exist (regardless of the number of offers) — in which case the weight should be zero.
 - Relatively few of the responsible firms in the industry submitted responsive offers (especially if the conditions of the solicitation unreasonably denied such firms a chance to compete).
 - The low offeror appears to enjoy an unfair competitive advantage.
 - Having used a performance or functional specification, the low offeror's proposed approach is less comparable to other proposed approaches than (a) to work performed under prior contracts or (b) to commercial counterparts.
 - In a “greatest value” competition, the deliverable in line for award is less comparable to other offered deliverables than to (a) those acquired under prior contracts or to (b) commercial counterparts.
 - The low offer is significantly out of line with other offers.
 - The low offer is significantly out of line (either lower or higher) with estimates of the should-pay price from other types of comparisons (to the extent that other comparisons are reliable and valid indicators of the “should pay” price).
 - The cost of the acquisition is substantial. The larger the dollar value of the contract, the more importance you should place on sizeable differences in dollars between different types of comparisons (even if the differences are modest when expressed in percentages).
-

Purchase Widgets (Cont.)

You can now use what you have learned to ensure that you can rely on the results of your price analysis based on competitive prices.

Step 1: Select Prices for Comparison.

The general conditions of competition have been met for your widget purchase. You have four responsive, responsible offerors, and you intend to award to the offeror with the lowest evaluated offer.

There is no evidence to suggest that any qualified source was unreasonably denied the opportunity to compete.

There is no evidence to suggest that the low evaluated offeror has an unfair advantage.

Step 2: Identify Factors that Affect Comparability.

The only factors that affect comparability are those stated in the solicitation.

Step 3: Determine the Potential Impact of Identified Factors on Price Analysis Comparisons.

Factors stated in the solicitation provide a valid basis for the comparison.

Step 4: Adjust Prices Selected for Comparison.

You adjusted competitive prices to consider quality-related costs. The low evaluated offeror's status on the Blue Ribbon Contractor List (BRCL) was considered in the overall evaluation.

Step 5: Compare Adjusted Prices to the Offer in Line for Award.

After consideration of quality-related costs, Offeror #3 has offered the lowest evaluated price. Other types of comparisons merit serious consideration, however, in view of the substantial dollar amount of the contract and the fact that the low offer is \$8,820 higher than your preliminary price estimate.

6.2.2 Use Commercial Prices

Introduction

Commercial prices are, by definition, prices being paid by the general public for a product. The circumstances of your purchase may be different, but data on commercial sales can provide valuable information for use in contract pricing.

"Horror stories" about overpricing seem to occur every few years. Most could have been avoided if contracting officers had considered the price that the general public would be willing to pay for the product. Contractors might have logical reasons for charging \$435 to provide a common hammer as part of a major systems contract. But, as the Government's agent, could you explain to the general public why you paid \$435 for a hammer that anyone could buy in any hardware store for less than \$35?

Selecting Prices For Comparison

Step 1. Identify and select commercial prices for comparison with offered prices.

Step 1A. Determine whether the competing firms have commercial prices for the same or like products.

When an offered price of \$100,000¹ or more is based on a catalog, market, or regulated price, the offeror might request an exemption from the submission of Certified Cost or Pricing Data. On the SF 1412, Request for Exemption from Submission of Certified Cost or Pricing Data, the offeror must provide you with information on the relationship of the offered price to catalog, market, or regulated prices. In Chapter 3, you learned about the criteria you must consider before granting an exemption.

Even if the offeror is exempt from submitting certified cost or pricing data thanks to "adequate price competition", you can still compare the offered price to the firm's catalog or market price for sales to the general public.

(Continued on next page)

¹\$500,000 for DoD, NASA, and the Coast Guard, for contracts awarded after December 5, 1990.

6.2.2 Use Commercial Prices (Continued)

Selecting Prices
For Comparison
(Cont.)

Step 1A. Determine whether the competing firms have commercial prices for the same or like products. (Cont.)

REMEMBER that you can require that the offeror either submit Certified Cost or Pricing Data or request an exemption using an SF 1412 if:

- *Adequate price competition does not exist.*
- *The price is not based on recent adequate price competition.*
- *The offered price exceeds \$25,000.*
- *You do not have sufficient evidence in hand to support a catalog, market, or regulated price exemption.*

As a minimum, consider the following questions:

- *Is the price based on a catalog price used for sales to the general public?*

Obtain a copy of the catalog (or excerpt) that pertains to your acquisition. The information must be available to the general public. It cannot come from a "confidential price list," or a typewritten "catalog" prepared by a salesperson just for you. A catalog for Government sales only is not sufficient either, unless the catalog prices are part of a previously agreed-to contract.

- *Is the price based on the market price of the item?*

Obtain independent evidence of the market price. Typically, the evidence will be a market quotation from news sources or trade publications.

- *Is the price based on a regulated price?*

Obtain documentation concerning the source of the regulation, including a copy of the law establishing the regulation and any periodic administrative rulings that make price changes. The regulation must be direct; the offeror cannot say, "Our prices are regulated because we sell to regulated industries." If there is any question, obtain legal assistance in your evaluation.

(Continued on next page)

6.2.2 Use Commercial Prices (Continued)

Selecting Prices
For Comparison
(Cont.)

Step 1B. Determine whether other firms have published prices for the same or comparable products.

You are attempting to determine the price that the commercial market is willing to pay for the product. If you cannot obtain commercial pricing information on that particular product, you may be able to obtain information on similar products that were not offered.

If you use the prices of comparable end items to support your decision on price reasonableness, you must address all the concerns outlined in Step 1A above. You must also provide evidence that the "comparable product" is truly comparable to the product that you are procuring.

Factors
That Affect
Comparability

Step 2. Identify factors that affect comparability.

Any of the factors identified in Section 6.1.2 may apply to published prices (i.e., market conditions may have changed since the effective date of the published prices; the purchasing power of the dollar may have changed; the published prices may have been based on different terms and conditions than solicited by the Government).

You should consider factors such as:

- Type of prices that have been published (Retail? Wholesale? Sale Prices?)
 - Correlation between historical prices (i.e., prices actually paid by different buyers) and published prices (i.e., does anyone in fact pay the suggested "retail" price?)
 - Multiple customer classes (e.g., are there different prices for different classes of customers—public vs. brokers vs. retailers?)
 - Soft discounts?
 - Rebates and discounting practices?
 - Extras—does the firm often, for promotional purposes, throw in "extras" (e.g., free packaging, free transportation, free insurance, etc.) for the same price?
-

(Continued on next page)

6.2.2 Use Commercial Prices (Continued)

Impact of the
Factors

Step 3. Determine the potential impact of identified factors on price analysis comparisons.

After you identify the factors that affect comparability, you must determine the effect of the factors identified on the viability of the related price analysis comparisons. For example:

- Will comparing the offer in line for award with available commercial prices provide credible evidence of price reasonableness?
- How much weight will you be able to put on available commercial price comparisons? Little or no weight should be placed on a “commercial” price that does not meet the general requirements of FAR 15.804-3(c).

FAR 15.804-3(c)

Adjusting Prices

Step 4. Adjust prices selected for comparison.

Given the above factors, you may have to adjust commercial prices for comparison with the low offer. Remember, there may be valid reasons why you should pay less than the commercial price. In particular:

- You may be buying much larger numbers than any other customer.
- You may not need "extras" provided to commercial customers.

The challenge is to use the available information to extrapolate the price that the Government should pay.

(Continued on next page)

6.2.2 Use Commercial Prices (Continued)

Comparing Prices

Step 5. Compare the adjusted prices to the low offer.

- *Can the offeror explain any differences?*

The offeror must be able to explain any differences between the offered price and commercial prices.

You may base prices for a family of products on a single base component. For example, a radio transceiver may require different connectors and adapters to work with different systems. The part number may even be different for each system, but the basic component is the same. If the offeror can support the price of the various related products by using the price of the basic component, plus the cost of the additional devices, you can use that data to price the entire family of products.

- *Is your purchase situation different from the typical commercial market situation?*

Even when you grant an exemption from the submission of Certified Cost or Pricing Data based on a catalog, market, or regulated price, you do not have to accept that price as the contract price. If you feel that the circumstances of your purchase are different, you should attempt to negotiate a different price.

- *Do other price analysis bases confirm that the offered price is reasonable?*

If other bases indicate that the offered price is fair and reasonable, use that information in preparing your price negotiation objectives.

Purchase Widgets (Cont.)

Following the market analysis procedures of Chapter 1, you have already identified catalog price data that can be used in your analysis:

Step 1: Select Prices for Comparison

The catalog prices that you identified are from a current catalog issued by Offeror #1.

Step 2: Identify Factors that Affect Comparability.

There is strong evidence of direct comparability because the catalog priced item is the same item offered by Offeror #1 under this solicitation.

Step 3: Determine the Potential Impact of Identified Factors on Price Analysis Comparisons.

You should be able to place strong weight on comparisons with the catalog price because the catalog is the item offered by Offeror #1 under this solicitation.

Step 4: Adjust Prices Selected for Comparison.

No adjustment is required to compare the catalog price with the offers under this solicitation. However, remember that the low evaluated offer was selected after consideration of quality-related factors. The catalog price comparison will not consider that adjustment.

Step 5: Compare Adjusted Prices to the Offer in Line for Award.

Using the catalog price, \$925 per unit, the price offered by Offeror #1 would have been \$181,300. The firm's actual offer was \$176,800. That is a \$4,500 discount based on the unusually large quantity involved. The adjustment for quality-related costs made the higher dollar offer from Offer #3 a better overall deal for the Government.

6.2.3 Use Historical Prices

Introduction

In Chapter 1, you learned about the importance of acquisition histories as a source of pricing data for estimating the probable price of an acquisition. You also learned that you need to know more about a prior acquisition than price alone to be able to use historical prices as a base to determine the probable range of prices for the product. The same is true when you use historical prices as a base for price analysis.

The following steps show you how to use historical prices as a base for price analysis.

Selecting Prices For Comparison

Step 1. Identify and select historical prices for comparison.

Ask yourself these questions:

- *Has the product been purchased before?*

The purchase may have been made by your office or by another purchasing office.

- *What was the historical price?*

As you learned in Chapter 1, you can obtain price information from purchase files, computer data files, or manual inventory item records.

- *Was the historical price fair and reasonable?*

It is not uncommon to review the purchase history of an item and find that no base other than last price paid was used to determine whether prices were fair and reasonable. Reviews of all purchases back to the first purchase have even revealed that the pricing on that purchase was an arbitrary allocation of the cost of a purchase of numerous spare items. For these items, no one had ever specifically examined the reasonableness of the item price.

(Continued on next page)

6.2.3 Use Historical Prices (Continued)

Factors
That Affect
Comparability

Step 2. Identify factors that affect comparability.

Consider all the factors identified in Section 6.1. As a minimum, ask the following:

- *How has the specific contracting situation changed?*

You need to understand the acquisition situation as it existed in the previous situation and how the current acquisition situation differs. Important data elements include (Page 1-16):

- Sources
- Quantities
- Production/Delivery Rates
- Start-up Costs
- Terms of Purchase

- *How has the general economic situation changed?*

Economic changes are reflected in the general level of inflation or deflation related to the product that you are purchasing. In general, you need to ask: Have prices gone up or down, and by how much?

Impact of the
Factors

Step 3. Determine the potential impact of identified factors on price analysis comparisons.

As with commercial prices, you must determine the effect of the factors identified on the viability of the related price analysis comparisons. You must answer the following questions:

- Will comparing the offer in line for award with available historical prices provide credible evidence of price reasonableness?
- How much weight will you be able to put on available historical price comparisons?

(Continued on next page)

6.2.3 Use Historical Prices (Continued)

Adjusting Prices

Step 4. Adjust prices selected for comparison.

Given the results from Steps 2 and 3, you may find it necessary to adjust historical prices for comparison with the offer in line for award.

Comparing Prices

Step 5. Compare the adjusted prices to the low offer.

- *How does the offered price compare with the historical price, considering changes in the contracting situation?*

You may be able to use quantitative techniques to adjust prices for changes in the contracting situation. If you cannot, you must subjectively analyze the changes.

- *Do other price analysis bases confirm that the offered price is reasonable?*

Because of the changes in the purchasing situation, historical prices typically do not provide a precise base for determining price reasonableness. If possible, use other bases of price analysis to confirm that the offered price is fair and reasonable.

Purchase Widgets (Cont.)

Following the market analysis procedures of Chapter 1, you have already identified historical widget prices for recent purchases of widgets.

Step 1: Select Prices for Comparison.

Specifically, you have identified two relatively recent widget purchases: 25 units at \$1,000 each, and 40 units at \$1,000 each.

Step 2: Identify Factors that Affect Comparability.

While relatively recent, the purchase of 25 units was made 12 months ago, and the purchase of 40 units was made 10 months ago.

Both quantities are relatively small when compared to the 196 units of the current purchase.

Other factors in the current and historical procurement situations are strikingly similar.

Step 3: Determine the Potential Impact of Identified Factors on Price Analysis Comparisons.

Prices for this type of item have generally increased over the past year.

You would generally expect prices to decline as quantities increase; the quantity you are purchasing is almost five times the volume purchased 10 months ago.

Step 4: Adjust Prices Selected for Comparison.

Specific quantitative techniques for price adjustment will be considered in Chapter 7.

Step 5: Compare Adjusted Prices to the Offer in Line for Award.

Meaningful comparison is not possible until after the differences in quantity and the changes in the buying power of the dollar are considered. However, it is important to note that the price of the offeror in line for award is \$970 per unit, a 3 percent overall reduction from the price paid for the most recent purchases.

6.2.4 Use Pricing Yardsticks

Introduction

Pricing yardsticks and cost estimating relationships (CERs) are extensions of the use of historical prices when determining whether an offered price is fair and reasonable.

To use a historical price to determine if an offered price is fair and reasonable, you must have a price history for the item. *What if you have never before purchased the item that you are purchasing today, but you have purchased similar items?* Pricing yardsticks and CERs make it possible to use the prices of a similar item or items to make your decision on price reasonableness.

These two techniques, pricing yardsticks and CERs, use the price of a known product or group of products to estimate the price of a similar product.

Pricing Yardsticks

A rough pricing yardstick, or rule of thumb, may be a generally accepted independent variable to use for pricing or making a comparison, using information from two or more items. It may also indicate a generally accepted relationship between physical and design characteristics and price. The relationships are typically intuitive. Little research may have been conducted to determine if a better predictive relationship exists. However, these relationships are generally accepted as being reasonably accurate.

In many industries, there are *yardsticks based on the use of specific independent variables*.

Example:

- The price of drilling a well is estimated using the depth in feet.
 - The price of a building is commonly estimated using the number of square feet.
-

(Continued on next page)

6.2.4 Use Pricing Yardsticks (Continued)

Pricing
Yardsticks
(Cont.)

In other cases, *facts, generally accepted price relationships, and judgment*, are used to estimate and analyze prices.

Example:

You are currently purchasing an electronic system, Product B, for the first time. The only offer that you receive is \$1,500 per unit for 20 units. During your analysis, you find that Product B is similar in function and design to Product A, built by another manufacturer. The major difference is that Product B is about 20 percent smaller than Product A, but with similar operational capabilities. Your organization has purchased Product A several times over a period of years. The most recent contract was priced at \$1,375 per unit in similar quantities. Your organization's technical personnel advise you that electronic systems 10 to 20 percent smaller than comparable larger systems should be expected to cost about 10 percent more.

Use this cost estimating relationship to determine and document price reasonableness:

"Product B is a complex electronic system that is similar in function and design to Product A, except that Product B is 20 percent smaller. Product A is currently priced at \$1,375. Technical personnel advise that a unit 10 to 20 percent smaller than Product A should be about 10 percent more expensive. Since Product B is only 9 percent more expensive, the price is considered fair and reasonable."

Definition -
Cost Estimating
Relationship

The term *cost estimating relationship (CER)* can be defined as any relationship that uses the cost or price and important physical or performance characteristics of one or more items to estimate cost or price of another item. In the general sense, CERs include the rough pricing yardsticks described above. However, CERs are typically based on more data and analysis. Their development requires the estimator to gather and analyze significant amounts of data on the relationship between potential independent variables and item prices. Detailed procedures for CER development are presented in Chapter 7.

(Continued on next page)

6.2.4 Use Pricing Yardsticks (Continued)

Selecting Prices For Comparison

Step 1. Select pricing yardsticks or CERs for comparison with offered prices.

Selection of an appropriate pricing yardstick or CER may simply require you to select from several available comparison bases, or you may need to develop new measures from available data.

As a minimum, you should ask the following questions:

- *For the rough yardstick, can you document the formulation of the rule of thumb and verify its acceptance in the market place?*

One of the keys to using a pricing yardstick is its general acceptance in the market. Be careful to determine if there is documented analysis of yardstick reliability. Also, determine whether both buyers and sellers agree on the validity of a particular yardstick and the reasonableness of values used in estimating. Sellers may commonly use a yardstick that produces an estimate higher than that normally accepted by buyers.

- *For a CER, can you validate the development process, using the techniques described in Chapter 7?*
-

Factors That Affect Comparability

Step 2. Identify factors that affect comparability.

Pricing yardsticks and CERs, just like any other historical pricing data, may be based on conditions that are no longer valid. Ask yourself the following questions:

- Have market conditions changed?
 - Has technology changed?
 - Has the production efficiency of the industry changed?
 - Has the purchasing power of the dollar changed?
-

(Continued on next page)

6.2.4 Use Pricing Yardsticks (Continued)

Impact of the Factors

Step 3. Determine the potential impact of identified factors on price analysis comparisons.

Determine the effect of the factors identified on the viability of the related price analysis comparisons. You must answer the following questions:

- Will comparing the offer in line for award with estimates developed using pricing yardsticks or CERs provide credible evidence of price reasonableness?
- How much weight will you be able to put on estimates developed using pricing yardsticks or CERs?

Adjusting Prices

Step 4. Estimate the price using the appropriate pricing yardstick or CER.

The specific techniques used in developing the estimate will depend on the pricing yardstick or CER used for comparison. See Chapter 7 to learn about CER development and application.

Comparing Prices

Step 5. Compare the estimated price with the low offer.

Consider these questions:

- *How does the offered price compare with the price developed using the pricing relationship?*

Use the appropriate price analysis technique to estimate what the price should be. Compare the offered price with the estimated price, and carefully document the techniques and the judgment you use in your analysis.

- *Do other price analysis bases confirm that the offered price is reasonable?*

Because of item differences, pricing relationships typically cannot precisely confirm or refute price reasonableness. If possible, use other bases of price analysis to confirm that the offered price is fair and reasonable.

Purchase Widgets (Cont.)

You have not identified any pricing yardsticks or cost estimating relationships that are meaningful in your analysis of the prices offered. This is not unusual, given the unique nature of widget construction and operation.

6.2.5 Use Government Estimates

Introduction

Government price estimates can be developed at any time during the contracting process. In this section, you will learn about determining price reasonableness using the purchase request estimate, value analysis, or visual analysis.

The Purchase Request

The purchase request estimate is the most common form of Government estimate and the only price analysis base that is available to you in every buy. In Chapter 1, you learned that you should carefully analyze how the purchase request's estimate was developed. You also learned what questions to ask when analyzing estimate reliability. The same questions should be considered before using the purchase request estimate to determine the reasonableness of any offered price.

Selecting Prices For Comparison

Step 1. Determine which Government estimates to consider and who should originate the estimate or estimates.

There are a number of potential sources of independent Government estimates. The most common is the purchase request estimate, but even the source of the purchase request estimate will vary depending on the product and agency procedures.

Estimates can come from inventory managers, program managers, users, budget officers, commodity specialists, and others. The estimate may be developed at the time the purchase is initiated or at another time during the acquisition process.

One method of estimate development that has been used quite successfully in contract pricing is **value analysis**. The steps of value analysis will be considered later in the section.

Factors That Affect Comparability

Step 2. Identify the factors that affect comparability.

Government estimates, especially those developed previously for such purposes as preparing budgets, may no longer be valid. Budget optimism or pessimism can have a significant effect on budget estimates. In addition, many estimates are developed years before the actual contract action is initiated. All estimates are subject to the same potential changes in the contracting environment that affect other bases for price analysis.

(Continued on next page)

6.2.5 Use Government Estimates (Continued)

Impact of the
Factors

Step 3. Determine the potential impact of identified factors on price analysis comparisons.

Determine the effect of the factors identified on the viability of the related price analysis comparisons. You must answer the following questions:

- Will comparing the offer in line for award with independent Government estimates provide credible evidence of price reasonableness?
- How much weight will you be able to put on independent Government estimates? Generally, Government estimates should be given relatively less weight than other bases for price analysis.

Adjusting Prices

Step 4. Adjust Government estimates as necessary for comparison.

Proper adjustment is especially important when you are relying on Government estimates that are not up to date.

Comparing
Prices

Step 5. Compare the Government estimate with the low offer.

The analysis may be a straightforward comparison between the Government estimate and the price in line for award. Independent Government estimates, particularly estimates based on value analysis, can also become the basis for trade-off analysis in support of contract negotiations.

Value Analysis

Value analysis is a specialized analysis of the function of a product and its related price. Value analysis may literally involve taking the item apart to determine how it is made and why it costs what it does. Value analysis is particularly important in situations where the product does not seem to be worth the price quoted. Value analysis provides information on product value in comparison with possible substitutes, and is particularly important when the Government estimate is the only price analysis base available.

(Continued on next page)

6.2.5 Use Government Estimates (Continued)

Value Analysis (Cont.)

Effective use of value analysis as a pricing tool will provide an insight into the inherent worth of the product. Value analysis can help determine whether product features should be modified or eliminated, and can be used to identify alternate products or processes that will perform the required function at a reduced cost.

In general, the steps of value analysis include the following:

- Step 1. Determine what the product must do.
- Step 2. Determine what total costs are related to purchasing the current product.
- Step 3. Identify other ways in which the function can be performed.
- Step 4. Document the total costs related to purchasing the alternative product.
- Step 5. Document the reasonableness of the current product or methods, or recommend appropriate changes.

Example:

Suppose you are purchasing a pair of shoes. Shoes are used to walk in, to protect the feet, to keep the feet warm, and to enhance appearance. If shoes are to be attractive, they must be made of certain types and quality of material. If appearance is not important to the Government, a less attractive, less expensive, but possibly more durable material can be used. By changing the quality of material required, price will change. The ability of the product to perform the other functions of a shoe may also change.

The key part of the analysis is Step 3, the identification of alternative ways to perform the required function. The following are examples of questions you should consider:

- *Can any part of the product be eliminated?*
- *Can a standard part replace a special part?*
- *Can a lower cost material or method be used?*
- *Can paperwork requirements be reduced?*
- *Can the product be packaged more economically?*

(Continued on next page)

6.2.5 Use Government Estimates (Continued)

Value Analysis (Cont.)

You may apply the techniques of value analysis to any product, regardless of its complexity. However, for detailed analysis, you should consider only those products offering potential cost reductions that merit the time and cost of the analysis required.

You should document and include the results of value analysis in the contract file. When you are satisfied that the value received supports the offered price, use that information to support your determination of price reasonableness. When you are not satisfied, use the information to document efforts to bring price in line with perceived value.

Visual Analysis

Visual analysis is a visual inspection of an item, or drawing of an item, to estimate its probable value. In visual analysis, you examine obvious external features of the product to determine value and related price. This technique is nothing more than comparing the product with other products by sight.

As a pricing tool, you can use visual analysis in place of value analysis for products that do not offer potential cost reductions that merit the time and cost of analysis required for detailed value analysis.

You can also use visual analysis as a preliminary step in value analysis. Technical experts can use visual analysis to review large numbers of products. The objective of such a review is to identify product candidates that appear to offer the potential cost reductions that merit the time and cost of analysis required for detailed value analysis.

Purchase Widgets (Cont.)

Your activities began with a purchase request and a purchase request price estimate.

Step 1: Select Prices for Comparison.

Currently, the only official Government estimate that you have is the purchase request estimate of \$1,000 per unit. Concerns about that estimate were documented in Chapter 1.

Step 2: Identify Factors that Affect Comparability.

The user indicates that the purchase request is based on the last price paid. The changes in the procurement situation were not considered in developing the estimate.

Step 3: Determine the Potential Impact of Identified Factors on Price Analysis Comparisons.

Since the price estimate is based on historical prices, comparisons are subject to the same concerns that were identified for using historical prices.

Step 4: Adjust Prices Selected for Comparison.

Specific quantitative techniques for price adjustment will be considered in Chapter 7.

Step 5: Compare Adjusted Prices to the Offer in Line for Award.

Since the purchase request estimate is based on historical prices, any analysis using the Government estimate should produce the same result as using the Government estimate.

Summary of Analysis

The price in line for award was selected, based on the low evaluated price, from four competitive offers. The catalog price of one of the offerors supports the price results of the competition. Recent prices paid and the Government estimate, which is based on historical prices, seem to support the reasonableness of the offered price. However, because of the changes in quantity and the value of the dollar, you still need to perform further analysis before finalizing your comparisons.

CHAPTER 7

CALCULATE THE SHOULD-PAY PRICE

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective 7/1

Identify typical applications for the quantitative technique(s) covered in this chapter.

Classroom Learning Objective 7/2

Estimate "Should Pay" prices using index numbers by collecting data, selecting a base year, calculating a price relative, and converting to an index.

Classroom Learning Objective 7/3

Describe how trend analysis can be used in estimating "Should Pay" prices.

Classroom Learning Objective 7/4

Estimate "Should Pay" prices using price-volume analysis by performing cost-volume-profit analysis, and analyzing the linear price-volume relationship and the price-volume data.

Classroom Learning Objective 7/5

Estimate "Should Pay" prices using pricing rules of thumb and cost estimating relationships (CERs), including determining sources of CERs and how they are developed.

Classroom Learning Objective 7/6

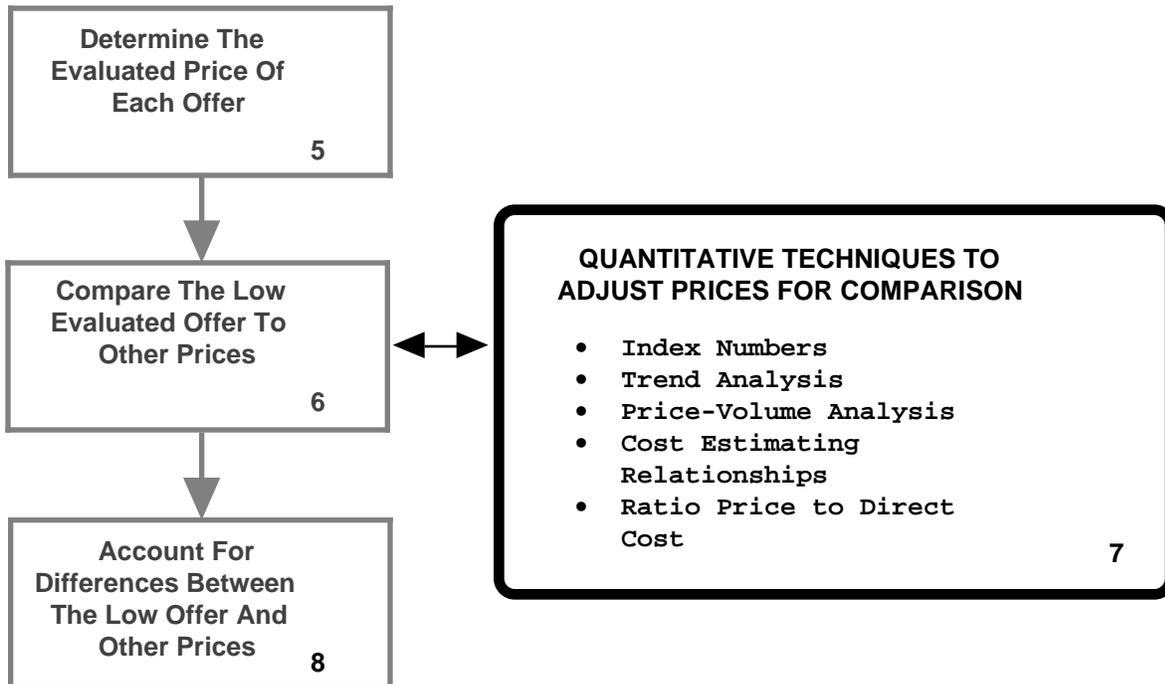
Estimate "Should Pay" prices using the ratio of price to estimated direct cost by isolating the percentage markup over identifiable direct cost, and determining geographical differences and comparisons over time.

Procedural Steps

Procedural Steps

The following figure shows where this chapter fits into the conduct of a price analysis.

STEPS IN ANALYZING PRICES (Chapters 5 - 8)



Overview

Why Use Quantitative Techniques?

In price analysis, you are attempting to determine whether an offered price is fair and reasonable. To do that, you must consider all available information about the product and price. Typically, much of the available information often requires quantitative adjustments before it can be used in price analysis. The information may be a price:

- from an earlier purchase,
- for a different quantity,
- from a different production period,
- for a similar, but not identical, item,
- from a different geographic area, and
- for delivery under different business terms than proposed for this contract.

To make these prices comparable to the low offer, you may need to use one or more of the quantitative techniques covered in this chapter.

This Chapter

This chapter covers the following five quantitative techniques:

SECTION	DESCRIPTION	SEE PAGE
A	7.1 Price Index Numbers	7-7
	7.1.1 Construct Price Index Numbers	7-8
	7.1.2 Use Government and Commercial Indexes	7-10
	7.1.3 Adjust Prices for Inflation/Deflation	7-15
B	7.2 Trend Analysis	7-23
	7.2.1 Analyze General Price Changes	7-25
	7.2.2 Analyze Other Pricing Relationships	7-27

(Continued on next page)

Overview (Continued)

This Chapter
(Cont.)

This chapter covers the following quantitative techniques:

SECTION	DESCRIPTION	SEE PAGE
C	7.3 Price-Volume Analysis	7-29
	7.3.1 Review Cost-Volume-Profit Analysis Concepts	7-30
	7.3.2 Use of Linear Price-Volume Relationship - Algebraic Analysis	7-32
	7.3.3 Use of Linear Price-Volume Relationship - Graphic Analysis	7-39
D	7.4 Cost Estimating Relationships (CERs)	7-45
	7.4.1 Use Rule of Thumb	7-47
	7.4.2 Develop Cost Estimating Relationships	7-48
	7.4.3 Estimate Should-Pay Prices	7-52
E	7.5 Ratio of Price to Estimated Direct Cost	7-55
	7.5.1 Estimate the Ratio of Price/ Identifiable Direct Cost	7-56
	7.5.2 Estimate Should-Pay Price	7-57

Typical Applications

Typical Applications

The following table presents typical applications of the quantitative techniques described in this chapter. The first column identifies potential differences between your acquisition and comparable acquisitions (either historical acquisitions or ongoing commercial transactions). The second column identifies the quantitative technique(s) that might be used to adjust the historical or commercial prices for comparison to the low offer.

WHEN THERE ARE DIFFERENCES IN:	CONSIDER USE OF:
Economic conditions (e.g., general price levels) at the time of the acquisitions being compared.	Index Numbers
Quantities acquired.	Price-Volume Analysis
Geographic localities in which the work is to be performed.	Index Numbers CERs
Differences in size, parts, physical features, performance, or other aspects of the deliverables being compared.	CERs
A known element of cost (e.g., direct labor costs) in providing the end item or service.	Ratio of Price to Estimated Direct Cost

Purchase Widgets (Cont.)

In Chapter 6, you learned about the methods of comparison that can be used in price analysis.

Thus far, you have compared the offered widget price with competitive offers and a catalog price. both comparison bases support the reasonableness of the offered price.

You have also made preliminary comparisons with historical prices and the purchase request estimate based on historical prices. These comparisons are incomplete because quantitative techniques are necessary to reflect price changes that may have resulted from the changing value of the dollar over time and changes in purchase quantity.

Chapter 7 presents the quantitative techniques most commonly used in price analysis. Two of these techniques, price index numbers and price-volume analysis, promise to be particularly valuable in this widget purchase example.

SECTION A

7.1 PRICE INDEX NUMBERS

Overview

Definition

Index numbers are ratios, usually expressed as percentages, used in measuring changes in a variable such as Price over time.

Use of Price Index Numbers

You can use price index numbers to:

- **Inflate or deflate historical prices**

Using price index numbers, you can compare the low offer with the price of the same or a similar product purchased in the past. Comparisons can be made in constant-year dollars—dollars free of changes related to general inflation or deflation.

- **Inflate/deflate prices for trend analysis**

You can use index numbers in trend or time series analysis of individual prices by eliminating or reducing the effects of inflation so that the analysis can be made in constant-year dollars.

- **Adjust contract price for inflation/deflation**

You can use index numbers to analyze the risk of substantial changes (upwards or downwards) in market prices for a product (or critical materials or labor required to make the product) during the effective period of a longterm contract. If this risk is high, you can use an Economic Price Adjustment (EPA) clause (see Chapter 2) to protect both parties against the potential changes in market prices. Some EPA clauses allow adjustments in the unit price of a deliverable based on changes in published economic indices.

In this section

In this section you learn how to:

TOPIC	SEE PAGE
7.1.1 Construct Price Index Numbers	7-8
7.1.2 Use Government and Commercial Indexes	7-10
7.1.3 Adjust Prices for Inflation/Deflation	7-15

7.1.1 Construct Price Index Numbers

Introduction If your activity repeatedly buys the same types of services or supplies, consider developing your own price indices to track trends in price over time.

Definition **Price index numbers** can indicate price changes for one or several related items or services over a period of time.

- Simple index numbers calculate price changes for a single item over time. Index numbers are more accurate if they are constructed using actual prices paid for a single product or service rather than the more general aggregated index.
- Aggregate index numbers calculate price changes for a group of related items over time. For instance, you might develop an aggregate index for all varieties of apples (i.e., Winesap, Red Delicious, White Delicious, etc.). Or you might develop an aggregate index for fasteners that combines nails and screws.

An example of an aggregate price index is the *Producer Price Indexes* (Bureau of Labor Statistics) that gives the changes in the average wholesale price of products sold in the United States over a given period of time.

Steps to Price Index Development To demonstrate construction of a price index, you will develop a simple index as an example. The basic steps are:

- Step 1. Collect data
- Step 2. Select an appropriate base period
- Step 3. Calculate a price relative
- Step 4. Convert price relative to a percentage

Follow the same steps to develop an aggregate index, using data for several products instead of one. In doing so, weight each product to represent its relative importance to the total. For example, weight the price for nails 90%, if screws only account for 10% of the fasteners that you buy.

Index Calculation Example **Step 1: Collect Data**

For each index period, collect average price data for the product, commodity, or service. For example, assume the following average yearly prices for a hoist:

(Continued on next page)

7.1.1 Construct Price Index Numbers (Continued)

Index Calculation
Example (Cont.)

Year	1987	1988	1989	1990	1991
Price	\$84.12	\$90.84	\$95.06	\$101.97	\$107.32

Step 2: Select an Appropriate Base Period

Select a base period appropriate for the data available. In this case, we will use the 1987 price, \$84.12.

Step 3: Calculate a Price Relative

A price relative is the relationship of the price in any period to the base period price. Calculate a price relative for each year (Column E) by dividing the price in each period (Column B) by the base period price (Column C).

PRICE INDEX CONSTRUCTION					
A	B	C	D	E	F
Year	Average Annual Price	1987 Base Price	Price Relative Calculation	Price Relative	Index Number
1987	\$84.12	\$84.12	$\$84.12 \div \84.12	1.000	100.0
1988	\$90.84	\$84.12	$\$90.84 \div \84.12	1.080	108.0
1989	\$95.06	\$84.12	$\$95.06 \div \84.12	1.130	113.0
1990	\$101.97	\$84.12	$\$101.97 \div \84.12	1.212	121.2
1991	\$107.32	\$84.12	$\$107.32 \div \84.12	1.276	127.6

Step 4: Convert to an Index Number

Convert to an index number (Column F) by multiplying each price relative (Column E) by 100. Normally, we round index numbers to the nearest tenth of a percent.

Using the table, you can see how the hoist price has changed relative to the 1987 price. For example, 1990 prices for hoists are 21.2% higher than in the base year 1987. 1991 prices are 27.6% higher than in the base year.

7.1.2 Use Government and Commercial Indexes

Introduction

You may not have the time or data necessary to construct necessary index numbers. Fortunately, there are many sources of previously constructed price index numbers general in scope, that you can use to estimate price changes for a particular product or service. Many specific sources are identified in the Appendix to Chapter 1, including:

- Bureau of Labor Statistics
- Other Government agencies
- Government contracting organizations
- Commercial forecasting firms
- Industry
- Newspapers

Use of Published Indexes

Use published indexes carefully, since a published index will usually not exactly fit the pricing pattern of the product or service you are analyzing. The data are not from a specific contractor or location, but represent national or regional averages. Nevertheless, preconstructed index numbers offer a practical alternative to the costly and time-consuming task of developing index numbers from basic cost data.

When you use published indexes, choose the index series that best fits your specific analysis effort. Usually, the closer the chosen index series relates to the item that you are pricing, the more useful the number will be in your analysis.

If you are buying a finished good, indices representing raw materials and purchased components will not necessarily provide an accurate basis for projecting a price for the finished good—prices may also be strongly influenced by trends in direct labor, cost of capital, etc. Accuracy can be improved through use of a weighted average index which represents changes in both labor and material elements of price. Many contracting organizations develop weighted average indexes for major products or major groups of products.

Bureau of Labor Statistics

The Government collects and publishes vast amounts of data on prices. Four of the best known sources of index numbers are published by the Bureau of Labor Statistics (BLS):

- Producer Price Indexes
- Consumer Price Index Detailed Report
- Monthly Labor Review
- Labor Hour and Earnings Report

(Continued on next page)

7.1.2 Use Government and Commercial Indexes (Continued)

Producer Price Indexes (PPI)

Probably the best known and most frequently used source of price index numbers for material pricing is the *Producer Price Indexes (PPI)* published monthly by the U.S. Department of Labor, Bureau of Labor Statistics (BLS). The indexes report monthly price changes at the producer/wholesale level of the economy. Two tables of the PPI are particularly useful in analysis: Table 5, Producer Price Indexes for the Net Output of Selected Industries and Their Products; and Table 6, Producer Price Indexes and Percent Changes for Commodity Groupings and Individual Items. The major difference is that Table 5 presents information by industry and Table 6 presents information by commodity.

Commodity Groupings of PPI

To give you an idea of the broad coverage of the PPI, the following table presents the 15 major commodity groupings of PPI Table 6.

PRODUCER PRICE INDEXES COMMODITY GROUPINGS	
COMMODITY CODE	COMMODITY DESCRIPTION
01	Farm Products
02	Processed Foods and Feeds
03	Textile Products and Apparel
04	Hides, Skins, Leather, and Related Products
05	Fuels and Related Products and Power
06	Chemicals and Allied Products
07	Rubber and Plastic Products
08	Lumber and Wood Products
09	Pulp, Paper, and Allied Products
10	Metals and Metal Products
11	Machinery and Equipment
12	Furniture and Household Durables
13	Nonmetallic Mineral Products
14	Transportation Equipment
15	Miscellaneous Products

7.1.2 Use Government and Commercial Indexes (Continued)

Consumer Price Index Detailed Report

The consumer price index (CPI), published monthly in the *Consumer Price Index Detailed Report*, reports on changes in consumer prices for a fixed mix of goods selected from the following categories:

- food
- clothing
- shelter and fuels
- transportation
- medical services

You **should normally not use the CPI in adjusting material prices** because the CPI reflects retail rather than wholesale price changes. However, the CPI can be of value in pricing services when labor rate increases are linked to changes in the CPI.

The Monthly Labor Review

The Monthly Labor Review includes selected data from a number of Government indexes, including:

- employment cost index
- consumer price index
- producer price indexes
- export price indexes
- import price indexes

That data and other information presented in the publication can prove useful in analyzing the price of contracts, such as service contracts, where direct labor is a significant part of contract price.

Labor Hour and Earnings Report

The Labor Hour and Earnings Report presents information on the hours worked and an earnings index for various classes of labor. Like the *Monthly Labor Review*, the report can be very useful in pricing contracts in which direct labor is a significant part of the contract price.

Other Government Agencies

Data on contract prices are also available from agencies other than the Bureau of Labor Statistics. The most notable are the Federal Reserve System and the Bureau of Economic Analysis.

(Continued on next page)

7.1.2 Use Government and Commercial Indexes (Continued)

Other
Government
Agencies (Cont.)

Federal Reserve System.

The Board of Governors publishes the *Federal Reserve Bulletin*, which includes economic indexes and data on business, commodity prices, construction, labor, manufactures, and wholesale trade. Each bank in the system publishes information each month with special reference to its own Federal Reserve District.

Bureau of Economic Analysis Publications.

The Bureau of Economic Analysis, Department of Commerce, publishes the *Survey of Current Business* and the *Business Conditions Digest*. The *Survey of Current Business* provides general information on trends in industry and the business outlook. It furnishes economic indexes on business, construction, manufactures, and wholesale trade. The *Business Conditions Digest* presents almost 500 economic indicators in a form convenient for analysis, as well as different approaches to the study of current business conditions and business prospects, including leading economic indicators.

Government
Contracting
Organizations

Many Government contracting organizations have teams of analysts who develop unique indexes that are particularly applicable to specific contracting situations. These indexes may be developed from raw price data, or they may be developed as weighted averages of published indexes.

Commercial
Forecasting
Firms

Numerous commercial indexes are available for use in contract price analysis. Most Government indexes only report historical price changes. Many commercial indexes also forecast future price movement. In situations where forecasts are necessary, commercial indexes may prove particularly useful. Before using such indexes, examine their development and consult with auditors, technical personnel, and other contracting professionals to assure that they are applicable in your analysis situation.

7.1.2 Use Government and Commercial Indexes (Continued)

Industry

Industry and trade publications frequently provide general forecasts of economic conditions and price changes anticipated in the industry. To identify which publications have economic information relevant to a particular product, ask Government technical personnel. Offerors can also assist you in the identification of appropriate publications. However, be sure to verify with Government personnel the appropriateness of sources of information recommended by offerors.

Newspapers

Publications, such as local, national, and financial newspapers, provide valuable forecasts of price changes in specific industries. The information reported is normally data provided by the Government, economic forecasting firms, or industry groups.

7.1.3 Adjust Prices for Inflation/Deflation

Introduction

Index numbers indicate the percentage change in price relative to the base year. For example, the 1991 index of 127.6, constructed in the table on p. 7-9, indicates that the average price of the hoist went up 27.6 percent relative to the average price in 1987.

Calculate Relative Price Change Between Two Periods

To adjust prices for inflation or deflation, you must be able to determine how prices changed between any two time periods. For example, looking at the table (p. 7-9) how did the price change between 1990 and 1991? To calculate percentage change using index numbers, you would use basically the same method as with actual price data.

Actual Price Data. Using the actual prices, \$107.35 for 1991 and \$101.97 for 1990, you can see that the 1991 price is 105.3 percent of the price in 1990:

$$\frac{\text{Price in 1991}}{\text{Price in 1990}} = \frac{\$107.35}{\$101.97} = 1.053$$

Multiply 1.053 by 100 to convert to a percentage = 105.3%.

Index Numbers. Using index numbers, you can make the same calculation and get the same answer:

$$\frac{\text{Index in 1991}}{\text{Index in 1990}} = \frac{127.60}{121.20} = 1.053$$

Multiply 1.053 by 100 to convert to a percentage = 105.3%.

Note: Answers may vary slightly because of rounding error in the various calculations.

Estimate Price Using Index Numbers

You can estimate the price that should be paid for an item in 1991 if you know (a) the price that was paid in 1990, (b) the index for 1990, and (c) the index for 1991. Using the index numbers, convert the 1990 price to a 1991 price by using either a price adjustment formula or a simple ratio.

(Continued on next page)

7.1.3 Adjust Prices for Inflation/Deflation (Continued)

Price Adjustment Formula Method	$\frac{\text{Index for Period } T_2}{\text{Index for Period } T_1}$	X	Known Price from Period T_1	=	Price Estimate for Period T_2
------------------------------------	---------------------------------------------------------------------	----------	----------------------------------	----------	------------------------------------

In this formula, T_1 (Time 1) represents the period for which you have an actual price. T_2 (Time 2) represents the period for which you are trying to estimate a price for comparison to the low offer. Generally, a period equates to either a given month or a given year (depending on the index). Thus, the “Price Estimate for Period T_2 ” is the adjusted historical price.

Example

$\frac{1991 \text{ Price Index}}{1990 \text{ Price Index}}$	X	1990 Price	=	1991 Price Estimate
$\frac{127.6}{121.2}$	X	\$101.97	=	\$107.35

Ratio Method	$\frac{\text{Index for Period } T_2}{\text{Index for Period } T_1}$	=	$\frac{\text{Price Estimate for Period } T_2}{\text{Known Price from Period } T_1}$
--------------	---------------------------------------------------------------------	----------	-------------------------------------------------------------------------------------

Example

$\frac{1991 \text{ Price Index}}{1990 \text{ Price Index}}$	=	$\frac{\text{Price Estimate for 1991}}{\text{Known Price in 1990}}$
$\frac{127.6}{121.2}$	=	$\frac{\text{Price Estimate For 1991}}{\$101.97}$
\$101.97 x 127.6	=	121.2 x Price Estimate for 1991
\$13,011.372	=	121.2 x Price Estimate for 1991
\$107.35	=	Price Estimate for 1991

(Continued on next page)

7.1.3 Adjust Price for Inflation/Deflation (Continued)

Estimate Price In
Determining
Cost/Price
Reasonableness

You can use index numbers to inflate or deflate prices to allow for general price level changes when determining if cost/price is reasonable. To perform this analysis, follow these steps:

- Step 1: Collect Available Price Data
- Step 2: Select an Index Series
- Step 3: Adjust Price for Inflation
- Step 4: Make a Direct Price Comparison

Example

Consider the problem of analyzing a contractor's proposed price of \$22,500 for a turret lathe to be delivered in 1991.

Step 1: Collect Available Data

A procurement history file reveals that the same machine tool was purchased in 1988 at a price of \$18,500. Determine whether the 1991 proposed price is reasonable.

Step 2: Select an Index Series

Select or construct an appropriate index series. A Machinery and Equipment Index might be selected as a reasonable indicator of price movement for a turret lathe. You could extract the data from a publication, such as the PPI, or from a similar commercial index.

YEAR	MACHINERY & EQUIPMENT INDEX
1986	100.0
1987	103.2
1988	106.5
1989	111.4
1990	115.4
1991	120.0

(Continued on next page)

7.1.3 Adjust Price for Inflation/Deflation (Continued)

Estimate Price In
Determining
Cost/Price
Reasonableness
(Cont.)

Step 3: Adjust for Inflation

After you have selected an index, you can adjust prices to a common dollar value level. In this case, you would normally adjust the historical 1988 price to the 1991 dollar value level. To make the adjustment, you simply use one of the methods already demonstrated.

$$\frac{\text{Index for Period } T_2}{\text{Index for Period } T_1} \times \text{Known Price from Period } T_1 = \text{Price Estimate for Period } T_2$$

$$\frac{1991 \text{ Price Index}}{1988 \text{ Price Index}} \times 1988 \text{ Price} = 1991 \text{ Price Estimate}$$

$$\frac{120.0}{106.5} \times \$18,500 = \$20,845$$

Step 4: Make Direct Price Comparison

Once you have made the adjustment for inflation, you can compare the offered and historical prices in constant dollars. The offered price is \$22,500, but the adjusted historical price is only \$20,845. Thus, the offered price is \$1,655, or 7.9 percent higher than what you would expect, given the available indexes and the historical price.

If you look at the percentage price change since the last purchase, the difference is even more pronounced. Using the indices, you projected an increase from \$18,500 to \$20,845, or about 12.7 percent. The actual increase was from \$18,500 to \$22,500, or about 21.6 percent. In this case, you might ask the offeror why his/her price rose at a rate 70% higher than the rate of inflation.

This analysis alone cannot determine whether the offered price is reasonable. The entire contracting situation must be considered. Differences in quantity, quality, delivery requirements, or other contract terms can also significantly affect price. However, our analysis using historical prices and index numbers does raise concern about the reasonableness of the offer. (See Chapter 8 for more information on accounting for differences).

In addition, this estimate of the “should pay” price is based on an acquisition made four years previously. You would generally not place great weight on this estimate vis-a-vis “should pay” estimates based on more current data.

(Continued on next page)

7.1.3 Adjust Price for Inflation/Deflation (Continued)

Adjustment for Trend Analysis

Often you will make a series of purchases over a period of time. Pricing trends may develop that are obscured by inflation/deflation. Adjusting prices for inflation/deflation will make it possible to more accurately track these trends.

Adjustment for trend analysis follows four steps similar to those used for data adjustment that are applied in preparation for direct comparison. The major difference is that several elements of cost/price data must be adjusted to a single time period. After adjustment, data is said to be in constant-year dollars.

- Step 1: Collect Available Price Data
- Step 2: Select an Index Series
- Step 3: Adjust Price for Inflation
- Step 4: Apply Appropriate Analysis Technique

After adjusting the historical unit prices, you can apply techniques such as price-volume analysis or cost estimating relationships to adjusted data to identify clear trends. Projections are based on the continuation of historical relationships. However, as with direct comparison, analysis based on historical relationships must consider any changes in the contracting situation and their possible effect on contract price. (See Chapter 8 for more information on accounting for differences).

Select Appropriate Adjustment Period

When adjusting historical prices for inflation, care must be taken in selecting the period of adjustment. There are two basic methods that you can use to adjust costs/prices:

- Purchase period to purchase period
- Delivery period to delivery period.

(Continued on next page)

7.1.3 Adjust Prices for Inflation/Deflation (Continued)

Purchase Period
to Purchase
Period

This is the method most commonly used to calculate the period of price adjustment because purchase dates are readily available.

An item that is being purchased in January, 1992 was last purchased in January, 1991. In this example, the logical adjustment period is January, 1991 to January, 1992.

If delivery schedules are similar, this period should be satisfactory. If delivery schedules are significantly different, you may be over- or underestimating the adjustment required.

Example

If the first purchase provided for delivery in June, 1991 and the second purchase provides for delivery in January, 1992, you may be over estimating the adjustment required. Presumably, the first purchase price considered price changes through June, 1991.

If the first purchase provided for delivery in January, 1991 and the second in June, 1992, you may be underestimating the adjustment required.

Delivery Period
to Delivery
Period

This method for determining the appropriate period of adjustment is probably more accurate, for the reasons described above. The problem with applying this method is the difficulty in collecting accurate information on delivery dates. Application is further complicated by deliveries made over an extended period of time.

For smaller dollar purchases in periods of limited price changes, the differences between purchase period to purchase period and delivery period to delivery period adjustment may not be very significant. However, as contract prices increase, or as price changes become more volatile, selection of the proper adjustment period becomes more important.

Purchase Widgets (Cont.)

Price index numbers appear to be the perfect tool to use in analyzing the changing value of the dollar over time. You will remember that, 12 months ago, the widget purchase price was \$1,000 for 25 units, and 10 months ago, the price was \$1,000 for 40 units. Based on that information, what would you expect similar quantities to cost today?

Twelve months ago the relevant index was 134.6. Ten months ago the relevant index was 135.5. Today, it is 140.0.

Using the price adjustment formula:

$$\frac{\text{Index for Period } T_2}{\text{Index for Period } T_1} \times \frac{\text{Known Price From Period } T_1}{1} = \text{Price Estimate for Period } T_2$$

For the 25 units bought 12 months ago:

$$\frac{140.0}{134.6} \times \$1,000.00 = \text{Estimated Price}$$

$$\$1,040.12 = \text{Estimated Price}$$

For the 40 units bought 10 months ago:

$$\frac{140.0}{135.5} \times \$1,000.00 = \text{Estimated Price}$$

$$\times \$1,033.21 = \text{Estimated Price}$$

SECTION B

7.2 TREND ANALYSIS

Overview

Introduction

A trend is a general course or prevailing tendency. In making the comparisons necessary in price analysis, you need to be aware of the trends that affect the price of the product that you are acquiring. You must be able to use past trends to make today's pricing decisions. You may be called upon to use your knowledge of the trends of the past to estimate how prices will be affected in the future.

Trends in Pricing

There are two basic types of trends that you may be called upon to analyze: time series and other relationships.

- *Time series trends* are changes that take place over time. The most common use of time-series trend analysis in price analysis is economic forecasting. Prices typically increase over time. Time does not cause prices to increase, but history does show a trend of increasing prices over time.
 - *Other relationships* used in pricing include price-volume relationships, improvement curves, and cost estimating relationships. In price-volume relationships and improvement curves, the independent variable is volume. In the cost estimating relationship, the independent variable is a physical or performance product characteristic.
-

Mathematics and Information

Analysis of trends typically requires knowledge of both mathematics and the forces that affect the trend. Mathematics untempered by understanding can lead you to some very erroneous analyses. Understanding of the forces that affect change without the mathematics tools necessary to perform an analysis can leave you unable to use the information available.

Overview (Continued)

In this section

This section provides an overview of the following kinds of trend analysis:

TOPIC	SEE PAGE
7.2.1 Analyze General Price Changes	7-25
7.2.2 Analyze Other Pricing Relationships	7-27

7.2.1 Analyze General Price Changes

Need to Analyze Price Changes

Good contracting practice requires you to price actions before performance whenever possible. Proactive pricing creates a more positive atmosphere for contract performance by ensuring that all parties understand the pricing situation before performance begins, and by providing the greatest possible incentive to contractors to control costs.

When the contract period is long, proactive pricing requires that you and the offeror agree on a price based on unknown costs. Because economic conditions can have a significant effect on contract cost, the ability to analyze economic trends is very important.

Mathematics of Analysis

Economic trends can be forecast using a variety of economic techniques, ranging from relatively simple time-series analysis to complex econometric models. Traditionally, the Government has used straight-line time-series models in forecasting short-term price changes. (Straight-line forecasting of economic changes is presented in the course *Introduction to Cost Analysis*.)

Sources of Information for Analysis

Time-series models can be useful as long as the historical trend continues unchanged. However, if the rate of inflation changes significantly, as it did in the 1970s, straight-line forecasts can be almost useless. You must be able to identify and use other available information to confirm or refute the results of any mathematical analysis.

Economic forecasts are available everywhere. Many of the better forecasts will include projected price indexes for future periods. These indexes can be used just like historical indexes to forecast prices in the future. Some of the better sources of price forecasts are the same as those already described in Section 7.1.2:

- **Government**
 - The Bureau of Economic Analysis Publications, Department of Commerce
 - Federal Reserve System
 - **Government Contracting Organizations**
 - **Commercial Forecasting Firms**
 - **Industry**
 - **Newspapers**
-

(Continued on next page)

7.2.1 Analyze General Price Changes

Government
Publications

Published by **The Bureau of Economic Analysis, Department of Commerce**, *Business Conditions Digest* presents almost 500 economic indicators in a form convenient for analysis, as well as different approaches to the study of current business conditions and business prospects. *The Survey of Current Business* provides general information on industry trends and the general business outlook, including economic indexes on business, construction, manufactures, and wholesale trade.

Federal Reserve System. The Board of Governors publishes the *Federal Reserve Bulletin*, which includes economic indexes and data on business, commodity prices, construction, labor, manufactures, and wholesale trade. Each bank in the system publishes information each month with special reference to its own Federal Reserve District.

Industry
Publications

Industry and trade publications frequently provide general forecasts of economic conditions and price changes that are anticipated in the industry. To identify which publications have economic information relevant to a particular product, you should consult Government technical personnel. Offerors can also assist you in identifying appropriate publications; however, the appropriateness of these should be verified with Government personnel.

Financial Groups
Publications

There are many firms that specialize in developing economic forecasts and relating forecasts to price changes for specific products.

Local, National,
and Financial
Newspapers

Local, national, and financial newspapers provide valuable forecasts of price changes in specific industries. The information reported typically consists of data provided by economic forecasting or industry groups.

7.2.2 Analyze Other Pricing Relationships

Need to Analyze Pricing Relationships

To perform an adequate price analysis, you must have an understanding of the factors that affect contract prices. When you use historical prices as your basis for price analysis, you rarely have two identical contracting situations. Usually, you must consider changes in volume. Depending on the product, you may also need to consider the effect of continued production experience.

If you are comparing prices for similar, but not identical products, you will need to be able to analyze the differences. It helps if you can define the significant factors that are driving price.

Mathematics of Analysis

The next two sections will present techniques for trend analysis.

- Section 7.3, Price-Volume Analysis, will provide tools for analyzing the effects of changes in quantity.
- Section 7.4, Cost Estimating Relationships (CERs), will present tools for identifying and analyzing the effect of factors that affect prices.

Improvement curves, the technique most commonly used to analyze the effect of continuous production, is presented in the second course in contract pricing, *Introduction to Cost Analysis*.

Sources of Information for Analysis

The best sources of information to support the analysis of these relationships are Government technical experts. Establish formal and informal lines of communication with these experts. Their support will prove invaluable.

Trend Analysis

SECTION C

7.3 PRICE-VOLUME ANALYSIS

Overview

Introduction

When you purchase supplies or services, you expect to pay a smaller price per unit as the purchase quantity increases. This general expectation remains the same whether you are buying items specifically built for the Government, or items that are mass-produced for a variety of commercial and Government customers. Price-volume analysis can provide data that you can use to estimate prices for different purchase quantities.

In price-volume analysis, you consider only short-term operations. The short term may be defined as a period too short to permit facilities expansion or contraction, or other changes that might affect overall pricing relationships.

The technique assumes use of the straight line in analysis. While actual price behavior may not follow a straight line, its use can closely approximate actual cost behavior in the short run. If purchase volume moves outside the relevant range of the available data, the straight-line assumption and the accuracy of estimates become questionable.

If you know that product variable costs are decreasing, consider use of the log-linear improvement curve concept. Improvement curves are particularly useful in limited production situations where you can obtain data on the price of all units sold. Improvement curves are presented in *Introduction to Cost Analysis*.

This section

This section covers:

TOPIC	SEE PAGE
7.3.1 Review Cost-Volume-Profit Analysis Concepts	7-30
7.3.2 Use Linear Price-Volume - Algebraic Analysis	7-32
7.3.3 Use Linear Price-Volume - Graphic Analysis	7-39

7.3.1 Review Cost-Volume-Profit Analysis Concepts

Definitions -
Types of Cost

To understand price-volume analysis, you should know some basic definitions.

In the short run, costs can be of three general types:

- Fixed Cost
- Variable Cost
- Semivariable Cost

Fixed Cost. Total fixed costs remain constant as volume varies in the relevant range of production. Fixed cost per unit decreases as the cost is spread over an increasing number of units.

Examples include: Fire insurance, depreciation, facility rent, and property taxes.

Variable Cost. Variable cost per unit remains constant no matter how many units are made in the relevant range of production. Total variable cost increases as the number of units increases.

Examples include: Production labor and production material. If no units are made, neither cost is necessary or incurred. However, each unit produced requires material and labor.

Semivariable Cost. Semivariable costs include both fixed and variable cost elements. Costs may increase in steps or increase relatively smoothly from a fixed base.

Examples include: Supervision and utilities, such as electricity, gas, and telephone. Supervision costs tend to increase in steps as a supervisor's span of control is reached. Utilities typically have a minimum service fee, with costs increasing relatively smoothly as more of the utility is used.

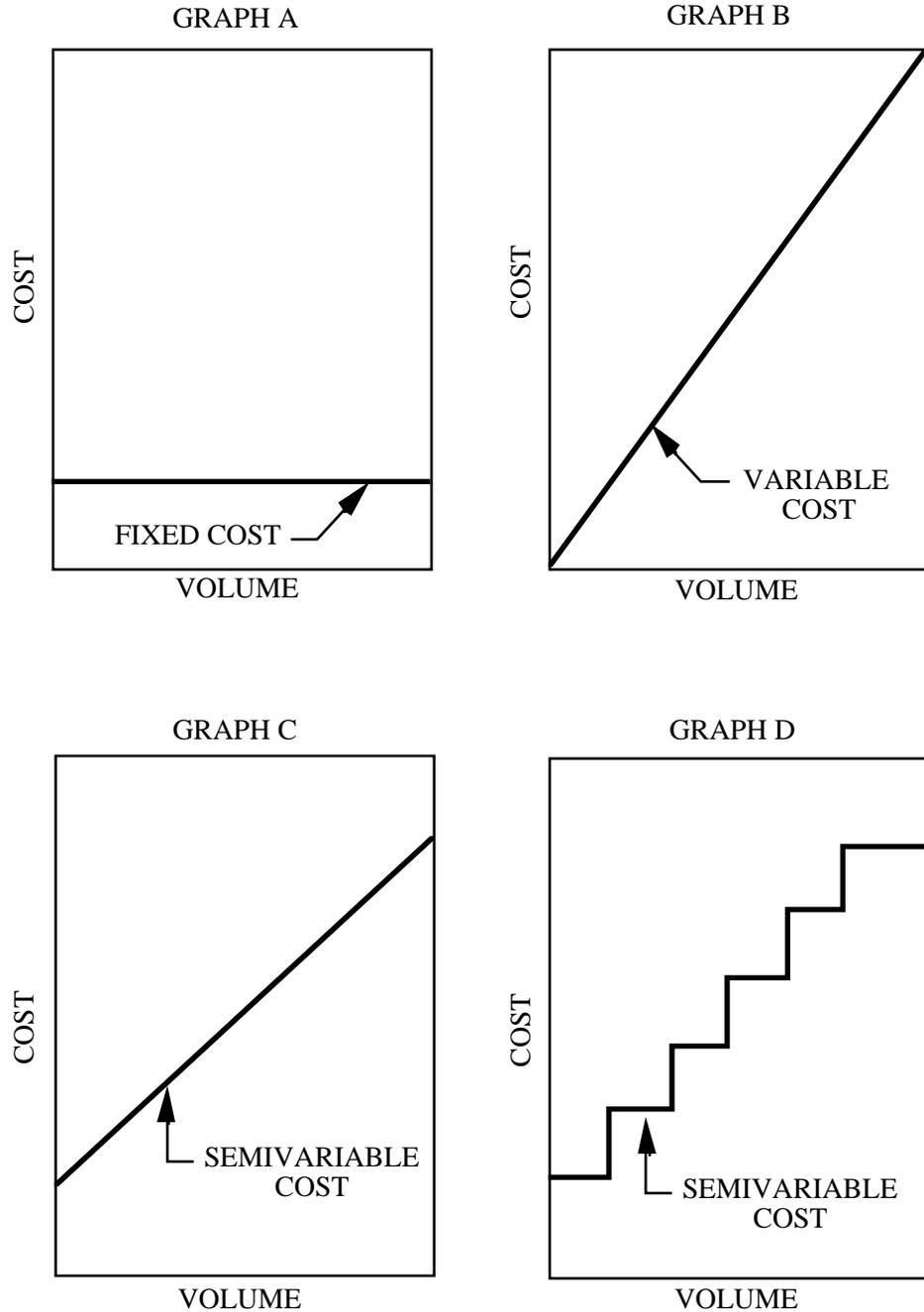
Definition -
Profit

Profit is the difference between total cost and revenue. In this analysis, a loss is expressed as a negative profit. Breakeven, which is neither profit nor loss, is a profit of zero dollars.

(Continued on next page)

7.3.1 Review Cost-Volume-Profit Analysis Concepts (Continued)

Types of Cost The graphs below illustrate the types of cost described above.



7.3.2 Use of Linear Price-Volume Relationship - Algebraic Analysis

Introduction

Understanding the assumptions and cost behavior analysis used in **cost-volume-profit analysis** will permit you, the buyer, to perform price-volume analysis. The assumption of linear cost behavior permits use of straight-line graphs and simple linear algebra.

Cost-Volume-Profit Analysis

Firms use an understanding of cost behavior to price products. Total price is equal to total cost plus profit:

$$\text{Total Price} = \text{Fixed Cost} + \text{Variable Cost} + \text{Semivariable Cost} + \text{Profit}$$

In analysis, the fixed cost component of semivariable cost is normally analyzed as a fixed cost. The variable component of semivariable cost is normally analyzed as a variable cost. So, total price can be calculated as:

$$\text{Total Price} = \text{Fixed Cost} + \text{Variable Cost} + \text{Profit}$$

Estimate Price Using Cost-Volume-Profit Analysis

Sales managers can use the following basic equation in product pricing:

Step 1: Estimate Volume.

A reasonable estimate of volume must be available in order to estimate fixed and variable cost.

Step 2: Estimate Fixed Cost.

Volume estimates will affect many of the equipment decisions that will determine fixed costs. Remember that fixed costs remain fixed within the relevant range of production. Volume estimates above or below that range may dictate a change in fixed costs so that the firm can remain competitive.

Step 3: Estimate Variable Cost.

To estimate total variable cost, the firm must first estimate variable cost per unit. Variable cost per unit can then be multiplied by volume estimates to calculate total variable cost. Variable costs per unit remain fixed within the relevant range of production.

(Continued on next page)

7.3.2 Linear Price-Volume Relationship - Algebraic Analysis (Continued)

Estimate Price
Using Cost-
Volume-Profit
Analysis (Cont.)

Step 4: Determine Profit.

Given the estimated costs, knowledge of the market, and knowledge of the risks involved, the firm can determine the profit necessary to produce the product.

Step 5: Determine Total Price.

The total price for all production is the sum of fixed cost, variable cost, and profit.

Step 6: Determine Unit Price.

Unit price is total price divided by volume. To simplify calculations, cost-volume-profit analysis assumes that all units are produced and sold during the same accounting period. *Note:* As volume increases within the relevant range of production, fixed costs are divided by more and more units. In cost-volume-profit analysis, the reduction of fixed cost per unit is the primary reason for price decreases as volume increases.

Linear Price
Equations

As a buyer, you may be asking what value this type of analysis has for you. In price analysis, you probably do not have detailed information on the offeror's cost structure. Typically, the only information you have is price data.

You can use available price information to conduct price-volume analysis, which is a form of cost-volume-profit analysis. Price-volume analysis is based on price information that is available to the buyer.

Calculate Total
Price

As a buyer, you normally calculate total price as follows:

$$\text{Total Price} = \text{Unit Price} \times \text{Volume}$$

Using algebraic symbols, you could write the same equation as:

$$P = P_U (V)$$

Where: P = Total Price
P_U = Unit Price
V = Volume

(Continued on next page)

7.3.2 Linear Price-Volume Relationship - Algebraic Analysis (Continued)

Calculate Total Price (Cont.)

For example, calculate the total price of an item when the unit price is \$2,000 and the quantity is 20 units.

Where: $P = P_U(\text{Vol})$
 $P = \$2,000 (20)$
 $P = \$40,000$, the total price for 20 units.

Calculate Unit Price

You can easily calculate the unit price when you know the total price and quantity. The algebraic formula would be:

$$P_U = \frac{P}{V}$$

For example, if you knew that the total price for 40 units is \$100,000, you could quickly calculate the unit price:

$$P_U = \frac{P}{V}$$

$$P_U = \frac{\$100,000}{40}$$

$$P_U = \$2,500$$

Estimate Quantity Discount Prices

Unit prices normally decline as volume increases, primarily because fixed costs are being divided by an increasing number of units. Buyers see these price reductions with increasing volume in the form of quantity discounts. Quantity discounts complicate the pricing decision, because a price that is reasonable for one volume may not be reasonable for a different volume.

Example

You know that the unit price for 100 units is \$3,000 and the unit price for 500 units is \$2,500. You are about to purchase 250 units. How can you use the available information to estimate the price for 250 units?

You know that unit prices are declining as volume increases, primarily because fixed costs are being divided by an increasing number of units. In price-volume analysis, you can think of these fixed costs as start-up costs. Total price then becomes the sum of the price for start-up plus the price for recurring production operations.

$$\text{Total Price} = \text{Start-up Price} + \text{Recurring Production Price}$$

(Continued on next page)

7.3.2 Linear Price-Volume Relationship - Algebraic Analysis (Continued)

Estimate
Quantity
Discount Prices
(Cont.)

The price for start-up will remain constant over the relevant range of production. Once production begins, the unit price related to recurring production will be constant, just as variable costs per unit are constant in the cost-volume-profit analysis. This relationship can be expressed as follows:

$$P = S + R$$

Where: P = Total Price

S = Portion of Price Related to Start-up

R = Portion of Price Related to Recurring Production

Recurring
Production
Portion of Total
Price

The **portion of total price related to recurring production** depends on two elements:

- Recurring Production Dollars per Unit
- Volume Produced

Or:

$$R = R_U (\text{Vol})$$

Where: R_U = Recurring Production Dollars per Unit

Vol = Quantity Produced

If you substitute this information into the basic Total Price Equation, you have the equation used in price-volume analysis:

$$P = S + R_U (\text{Vol})$$

Example:

If you know that the price of Start-up is \$500, the unit price related to recurring production is \$10, and the Volume produced is 1,000 units, you can calculate the Total Price of the purchase.

Where: $P = S + R_U (\text{Vol})$

$$P = \$500 + \$10(1,000)$$

$$P = \$500 + \$10,000$$

$$P = \$10,500$$

Estimate the
Recurring
Component of
Price

Usually you will not know what components of price an offeror considers fixed and variable. Yet, given the prices and quantities for two different purchases, it is possible to estimate the recurring production price component by applying the straight-line assumption.

(Continued on next page)

7.3.2 Linear Price-Volume Relationship - Algebraic Analysis (Continued)

Estimate the
Recurring
Component of
Price (Cont.)

Remember that the fixed start-up portion of total price does not change, no matter what the volume, as long as you remain in the relevant range of purchase volume. So any change in total price is the result of a change in the recurring component of total price.

Remember also, that recurring component dollars per unit do not change within the relevant range of volume.

Therefore, you can calculate recurring component dollars per unit as follows:

$$R_U = \frac{\text{Change in Total Price}}{\text{Change in Volume}}$$

$$R_U = \frac{\text{Total Price at Point 2} - \text{Total Price at Point 1}}{\text{Volume at Point 2} - \text{Volume at Point 1}}$$

Or, using the symbols defined earlier:

$$R_U = \frac{P_2 - P_1}{\text{Vol}_2 - \text{Vol}_1}$$

Example:

You are analyzing an offeror's price proposal. As part of the proposal, the firm offered 5,000 units of the item for \$60,000. The same quote offered 4,000 units for \$50,000.

What is the apparent recurring component of price per unit?

$$R_U = \frac{P_2 - P_1}{\text{Vol}_2 - \text{Vol}_1}$$

$$R_U = \frac{\$60,000 - \$50,000}{5,000 - 4,000}$$

$$R_U = \frac{\$10,000}{1,000}$$

$$R_U = \$10$$

(Continued on next page)

7.3.2 Linear Price-Volume Relationship - Algebraic Analysis (Continued)

Estimate Fixed
Start-Up
Component of
Price

If you know total price and the recurring component of price per unit for any purchase quantity, you can calculate the fixed start-up component of price by using the basic total price equation.

Example:

In the previous section, you calculated recurring component dollars per unit, given information on two data points. Using the total price for 5,000 units, or \$60,000, the calculated recurring component of price per unit, \$10; and the total price equation, you can calculate the fixed component of price.

$$P = S + R_U (\text{Vol})$$

Where: $P = \$60,000$
 $R_U = \$10$
 $\text{Vol} = 5,000$

$$\$60,000 = S + \$10(5,000)$$

$$\$60,000 = S + \$50,000$$

$$\$60,000 - \$50,000 = S$$

$$\$10,000 = S$$

Develop the
Linear Equation

If you have estimated values of the start-up and recurring components of price, you can develop an equation for estimating contract prices in the relevant range of available data.

Example:

Continuing the same example, you can use the estimated values to estimate total price.

What is the estimated price for 4,400 units?

$$P = S + R_U (\text{Vol})$$

where:

$$R_U = \$10$$

$$S = \$10,000$$

(Continued on next page)

7.3.2 Linear Price-Volume Relationship - Algebraic Analysis (Continued)

Develop the
Linear Equation
(Cont.)

$$P = \$10,000 + \$10(\text{Vol})$$

If:

$$\text{Vol} = 4,400$$

Then:

$$P = \$10,000 + \$10(4,400)$$

$$P = \$10,000 + \$44,000$$

$$P = \$54,000$$

Estimate Price
per Unit

Once you have calculated total price (P), you can calculate price per unit by dividing total price by volume (Vol).

$$P_U = \frac{P}{\text{Vol}}$$

Or: $P_U = \frac{54,000}{4,400} = \12.27

7.3.3 Linear Price-Volume Relationship - Graphic Analysis

Introduction

When you have only two data points, you must generally assume a linear relationship. As you get more data, you can determine whether there truly is a linear relationship.

You should always display the data graphically before performing an algebraic analysis, because:

- Graphic analysis is the best way of developing an overall view of the price-volume relationship.
- Graphic analysis is useful in analyzing price-volume relationships, particularly when the price and volume numbers are relatively small.
- Even when actual analysis is performed algebraically, graphs can demonstrate price-volume analysis to others.

Four Steps to Graphic Analysis

There are four steps involved in analyzing price-volume relationships graphically, using graph paper.

- Step 1: Determine the appropriate scale.
- Step 2: Plot the available price-volume data.
- Step 3: Fit a straight line to the data.
- Step 4: Estimate the price for a given volume.

Step 1: Determine the appropriate scale.

Volume is considered the independent variable, and should be shown on the horizontal axis. Price is the dependent variable, and is shown on the vertical axis. The scales on the two axes do not have to be the same; however, on each axis, one block must represent the same amount of change as every other block on that axis. Each scale should be large enough to permit analysis, and small enough to permit the graphing of all available data and anticipated data estimates.

Step 2: Plot the available price-volume data.

On the horizontal axis, find the volume given for one of your data points. Draw an imaginary vertical line from that point, up to the related price on the vertical axis. Then draw an imaginary horizontal line from that point over to the vertical axis. The point where the two lines intersect represents the price for the given volume. (If you are not comfortable with imaginary lines you may draw dotted lines to locate the intersection.) Repeat this step for each data point.

(Continued on next page)

7.3.3 Linear Price-Volume Relationship - Graphic Analysis

Four Steps to
Graphic Analysis
(Cont.)

Step 3: Fit a straight line to the data.

In this course, all data points will fall on a straight line. Thus, all you have to do to fit a straight line is to connect the data points. When all points do not fall on the line, a straight line can be fit to the data using either visual or least-squares-best-fit analysis. Techniques for visual fitting will be addressed in the Introduction to Cost Analysis course. Least-squares-best-fit analysis can be performed using programs available with many calculators and computers.

Step 4: Estimate the price for a given volume.

Draw an imaginary vertical line from the given volume on the horizontal axis to the point of intersection with the straight line that you fit to the data points. Then move horizontally until you intersect the vertical axis. That point is the graphic estimate of the price for the given volume of the item.

These four steps can be used to graph and analyze any price-volume relationship.

Example

You have been asked to estimate the price of 400 units, given the following data:

<u>Units</u>	<u>Total Price</u>
200	\$100,000
500	\$175,000
600	\$200,000

Step 1: See Graph p.7-41. Determine scale.

Step 2: See Graph p.7-41. Plot data points.

Step 3: See Graph p.7-42. Fit a straight line.

Step 4: See Graph p.7-42. Estimate the price for a given volume.

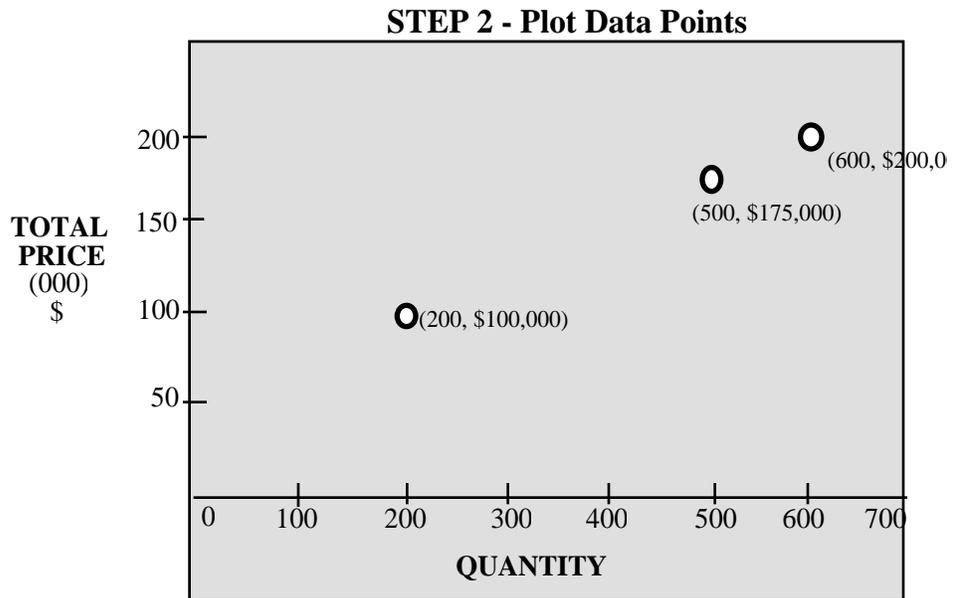
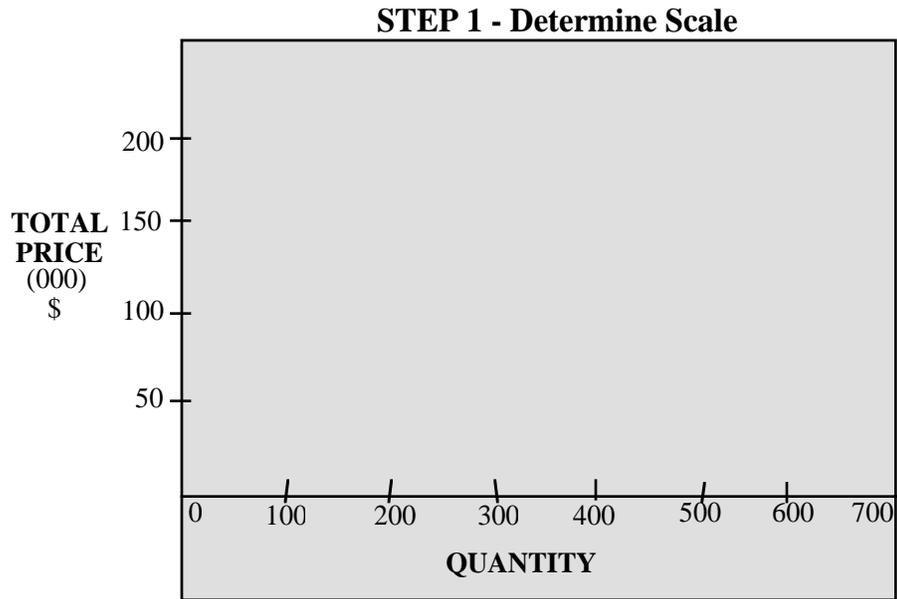
The estimate for 400 units is shown here. In addition, you can estimate the price of making zero units. In this example, the price of making zero units, \$50,000, is the fixed price for this set of data. The \$50,000 is the portion of price related to start-up in the relevant range of production. It does not mean that the Government must pay the firm \$50,000, even if no product is purchased.

(Continued on next page)

7.3.3 Linear Price-Volume Relationship - Graphic Analysis (Continued)

Example of
Analysis of
Price-Volume
Relationship
(Cont.)

The following graphs illustrate the first two steps in analyzing a price-volume relationship.

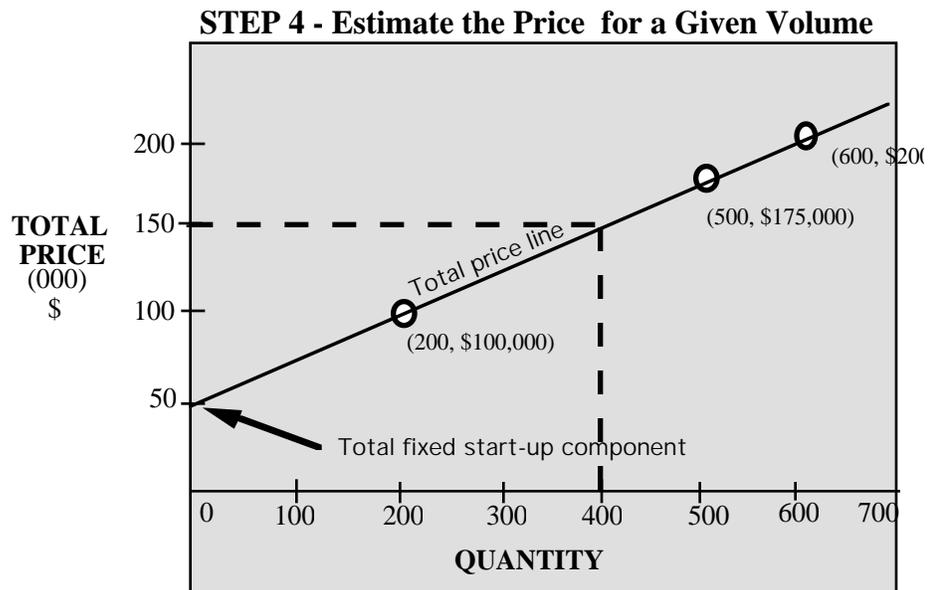
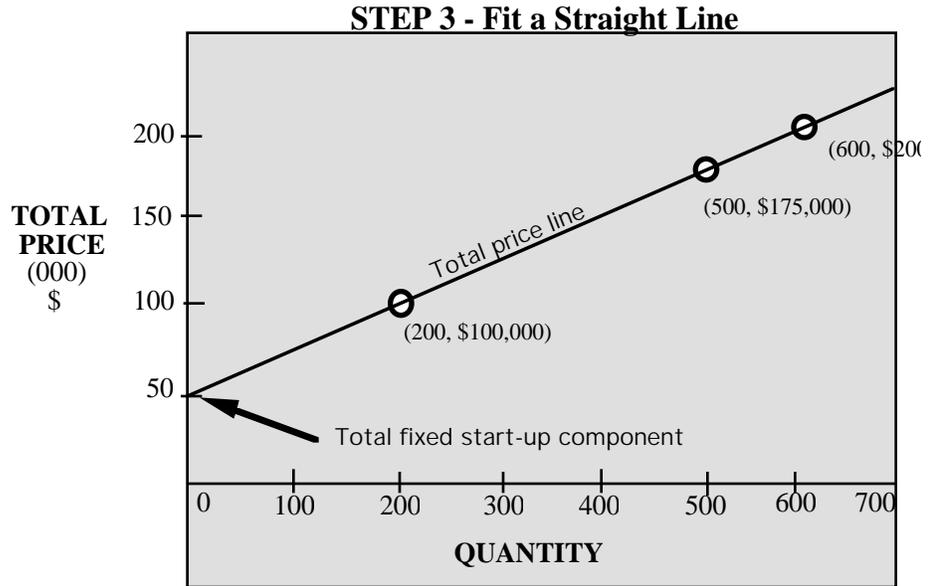


(Continued on next page)

7.3.3 Linear Price-Volume Relationship - Graphic Analysis (Continued)

Example of Analysis of Price-Volume Relationship (Cont.)

The following graphs illustrate the last two steps in analyzing a price-volume relationship.



Purchase Widgets (Cont.)

Remember, one of the conditions for useful application of price-volume analysis is the ability to make projections within the range of known data, the relevant range. For your widget purchase, you have prices for 25 and 40 units. The current purchase of 196 units is substantially outside that range.

While it is not possible to develop a reasonable estimate of what the price should be from the data available, it is useful to note that, in today's dollars, the price for 196 is less than the price paid for 25 and 40 in the past.

SECTION D

7.4 COST ESTIMATING RELATIONSHIPS (CERs)

Overview

Introduction

A cost estimating relationships (CER) is an equation in which the price estimate is a function of one or more independent variables.

For example, suppose there is a predictable relationship between the **size** (measured in square feet of floor space) of an unheated, single-story warehouse and the **price** for building such a warehouse in your locality. This CER might take the following form:

$$\text{Square Feet} \times \$79.65 \text{ per square foot} = \text{Price}$$

If your agency plans on building a 150,000 square foot unheated, single-story warehouse, then applying the CER would yield the following estimate:

$$150,000 \times \$79.65 = \$11,947,500$$

Warning

Before relying on a CER, examine how closely its predicted prices have matched actual prices.¹ If the data suggest that a CER's estimate is only "accurate" $\pm 25\%$, the CER may be of little use to you.

For example, reconsider the above CER:

$$\text{Square Feet} \times \$79.65 \text{ per square foot} = \text{Price}$$

Suppose you discover that this CER was derived from the following table on construction contracts for unheated warehouse space in your locality, all awarded in the prior fiscal year:

Contract	Price	Square Feet	Price Per Square Foot
1	\$10,000,000	100,000	\$100
2	\$4,000,000	80,000	\$50
3	\$16,000,000	200,000	\$80
4	\$11,200,000	160,000	\$70
5	\$15,750,000	175,000	\$90
Total	\$56,950,000	715,000	N/A

¹i.e., by applying the appropriate "measure of variability" — such as the range of averaged prices, the standard deviation of the mean, or the prediction interval when predicting price as a linear function of a single independent variable.

Overview (Continued)

\$79.65 is the average (or mean) price per square foot ($\$56,950,000 \div 715,000$ square feet). In the above example, we used this average to estimate a price of \$11,947,500 for building a warehouse with 150,000 square feet of floor space.

Suppose the low offer is \$13,350,000 — \$89 per square foot. Does the CER give you reason to believe that this price is unreasonable? Not necessarily — two of the five contract awards exceeded that price on a per square foot basis. The range of values represented by this CER is so great as to render the CER of little use in analyzing the reasonableness of this low offer.

Types of CERs

Cost estimating relationships (CERs) range from simple rules-of-thumb to complex mathematical formulas (e.g., using cubic or exponential functions). In this text, you will learn more about rules of thumb and “linear” CERs.

CERs differ not only in mathematical complexity but also in kind. There are two basic types of CERs:

- Parametric.
- Cost-To-Price (see Section 7.5 for an example).

This section describes parametric CERs. Parametric CERs relate price to one or more characteristics (sometimes called "parameters" or "drivers") of the end item. It could be a physical characteristic, such as weight (as in "dollars per pound"). Or it could be a performance parameter (e.g., horsepower). If you can identify an independent characteristic that varies in a predictable manner with price, you can establish a CER.

In this section

You will learn the following steps in developing and applying CERs:

TOPIC	SEE PAGE
7.4.1 Use Rule of Thumb	7-47
7.4.2 Develop Cost Estimating Relationships (CERs)	7-48
7.4.3 Estimate Should-Pay Prices	7-52

7.4.1 Use Rule of Thumb

Introduction

Cost estimating rules of thumb are used in many professions, such as construction and realty. For example, when you compare the prices of houses, you typically do so in price per square foot. Using this rule of thumb, you can compare the cost of different houses or the same house in different parts of the country. Price per square foot is not a very accurate CER for pricing houses, but is widely accepted and relatively easy to calculate. The same can probably be said about most rules of thumb.

Validity of the Rules of Thumb

Like any CER, a rule of thumb can be based on the performance or on the physical characteristics of the item being priced. Unlike other CERs, rules of thumb typically have not been validated for use in specific estimating situations. Validation has come from acceptable results produced in a variety of situations over a number of years. Before you use a rule of thumb, be sure that it is valid for your estimating situation.

Building Your Own "Rules Of Thumb"

When buying something which is "similar" but not "identical" to items acquired in the past, you may be able to build your own "Rule Of Thumb" for a "quick and dirty" check on price reasonableness.

Example

You have solicited offers for 1,000 executive tables, each 4' X 6' (24 square feet of surface area). The low offer is \$425. Is it reasonable?

From acquisition histories, you learned that two separate contracts were awarded last month for executive tables of similar design and materials. The first contract was for 1,000 tables, each 3' X 5' (surface area: 15 square feet). The contract price was \$300, or \$20 per square foot of surface area. The second contract was for another thousand tables, each 5' X 7' (surface area: 35 square feet). The contract price was \$630, or \$18 per square foot. These data suggest the following "Rule Of Thumb" for executive tables which **range between** 15 and 35 square feet of surface area.

$$\text{Surface Area} \times \$19 \text{ per square foot} = \text{Price}$$

$$24' \times \$19 = \$456$$

Your assumption is that **price** varies with **table size**. Given this assumption, the offered price of \$425 appears to be within reason. Of course, you are also assuming that the prior prices were reasonable.

However, recognize such a "Rule Of Thumb" for what it is — a shortcut. When significant dollars are at stake or when your activity will be repeatedly acquiring items of the same kind, a CER should be developed as described in the next section.

7.4.2 Develop Cost Estimating Relationships (CERs)

Introduction

CER development follows six basic steps. Follow them if you are developing the CER. Before you use a CER developed by someone else, determine whether these six steps were performed properly.

- Step 1: Designate and define the dependent variable (normally Price).
 - Step 2: Select independent variables (i.e., the characteristics) to be tested against the dependent variable.
 - Step 3: Collect data on the relationship between the dependent and independent variables.
 - Step 4: Explore the relationship between the dependent and independent variables.
 - Step 5: Select the relationship that best predicts the dependent variable.
 - Step 6: Document your findings.
-

Step 1

Designate and define the dependent variable.

If you are the CER developer, you must specify how the CER will be used in terms of what it will estimate.

- Will the CER be used to estimate price, labor hours, or some other measure of the acquisition cost?
 - Will the CER be used to estimate total product price or to estimate the price of one or more components?
-

Step 2

Select independent variables to be tested against the dependent variable.

When selecting the independent variable, you should draw on personal experience, the experience of others, and published sources of information. Consider the following factors:

- Variables should be quantitatively measurable. Parameters such as maintainability are difficult to use in estimating because they are difficult to measure quantitatively.
 - Data availability is also important. If historical data cannot be obtained, it will be impossible to analyze and use the variable as a predictive tool.
-

(Continued on next page)

7.4.2 Develop Cost Estimating Relationships (CERs) (Continued)

Step 2 (Cont.)

- If there is a choice between developing a CER based on performance or physical parameters, performance parameters are generally the better choice. This is because performance parameters are usually known before design characteristics.
-

Step 3

Collect data on the relationship between the dependent and independent variables.

The collection of data is often the most difficult and time-consuming step in developing a CER. It is essential that you check and double check all data to ensure that it is relevant, comparable, and relatively free of unusual costs.

Step 4

Explore the relationship between the dependent and independent variables.

The purpose here is to determine the nature and degree of relationship between the independent and dependent variables. This phase of establishing a CER can involve a variety of analytical techniques from simple graphic analysis to complex mathematical analysis. Linear line-of-best-fit analysis is one mathematical technique that is commonly used.

Step 5

Select the relationship that best predicts the dependent variable.

After exploring a variety of relationships, you must select the one that best describes the data. In graphic analysis, you would describe how the independent variable predicts the values of the dependent variable. A significant correlation (relationship) between a potential independent variable and the dependent variable usually indicates that the independent variable will be a good predictive tool.

(Continued on next page)

7.4.2 Develop Cost Estimating Relationships (CERs) (Continued)

Step 6

Document your findings.

Documentation of the CER is essential to permit others involved in the estimating process to trace the steps of CER development. Documentation should include the parameters tested, the data gathered, sources of data, time period of the data, and any adjustments made to the data.

7.4.2.2 Review Sources of CERs

Introduction

Many CERs are developed by the organizations that use them. In this way, the user organization assures the validity of the CER for the particular estimating situation.

Example of CERs

Information on specific CERs, and information on cost drivers that can be used in CER development, can be found in industry and trade publications. Articles by practitioners and researchers frequently provide free sources of CER information. Advertisements by corporations that specialize in the development of CERs provide a link to proprietary CERs developed to meet specific needs of the industry.

Examples of CERs used in contract pricing include:

PRODUCT	INDEPENDENT VARIABLE
Building Construction	Floor space, roof surface area, wall surface
Gears	Net weight, percent of scrap, inches of teeth cut, hardness, envelope
Trucks	Empty weight, gross weight, horsepower, number of driving axles, loaded cruising speed
Passenger Car	Curb weight, wheel base, passenger space, horsepower
Turbine Engine	Dry weight, maximum thrust, cruise thrust, specific fuel consumption, bypass ratio, inlet temperature
Reciprocating Engine	Dry weight, piston displacement, compression ratio, horsepower
Sheet Metal	Net weight, percent of scrap, number of holes drilled, number of rivets placed, inches of welding, volume of envelope
Aircraft	Empty weight, speed, useful load, wing area, power, landing speed
Diesel Locomotive	Horsepower, weight, cruising speed, maximum load on standard grade at standard speed

7.4.3 Estimate Should-Pay Prices

Introduction Use of a CER in contract pricing should begin with validation of the CER for the intended use.

Validate the CER To validate a CER, consider the following questions:

- Did CER development follow the six-step development procedure described above?
- Is the item that you are about to price similar in all significant characteristics to the items used to develop the CER?
- How well does the CER do in estimating the price of items with known reasonable prices?

Example:

Suppose that you just read an article on a CER recommended for estimating the price of new office buildings. You would want to answer the questions above before you used it on a specific job.

- The article should provide the answers to the first two questions above. If not, contact the authors.
- You and your co-workers must provide the answer to the third question. Actual use of the CER on items with known reasonable prices will help you determine the reliance that you can place on the CER. It will also provide support for any conclusions that you reach using the CER.

Estimate Development Once you develop and validate a CER for your situation, you can use it to estimate prices of similar items in similar circumstances. This is usually relatively easy.

Example:

Consider the application of the CER to estimate the price of office buildings. The building that you are considering purchasing has 2,600 square feet of office space. Prior validation has assured you that the CER can be applied in this situation, and that the actual price should not, in all likelihood, vary more than $\pm 2\%$ from the CER estimate.

(Continued on next page)

7.4.3 Estimate Should-Pay Prices (Continued)

Estimate
Development
(Cont.)

$$\text{Price} = \$117,750 + \$17.70 (S)$$

Where: S = Square Feet of Office Space

$$\text{Price} = \$117,750 + \$17.50 (2600)$$

$$\text{Price} = \$117,750 + \$45,500$$

$$\text{Price} = \$163,250 \text{ estimated price } (\pm \$3,265)$$

Like most other tools of price analysis, you must use your judgment when applying CERs. Judgment is required to evaluate the historical relationships in the light of new technology, new design, and other similar factors. Blind use of any tool can have serious consequences.

Cost Estimating Relationships (CERs)

SECTION E

7.5 RATIO OF PRICE TO ESTIMATED DIRECT COST

Overview

Introduction

This estimating technique (also known as **ratio analysis**) is most commonly used in situations where direct labor cost is a significant portion of contract price. By isolating direct labor cost, you can estimate the total percentage of overhead and profit that is applied to direct labor cost. You can then use the ratio or percentage difference to estimate the cost of similar contracts with different labor hours and labor rates.

In this section

In this section you will learn how to:

TOPIC	SEE PAGE
7.5.1 Estimate the Ratio of Price/Identifiable Direct Cost	7-56
7.5.2 Estimate Should-Pay Price	7-57

7.5.1 Estimate the Ratio of Price/Identifiable Direct Cost

Process

You can estimate the price/direct cost ratio by following a four-step process:

- Step 1: Collect data on similar contracts.
- Step 2: Identify the direct labor requirements.
- Step 3: Estimate direct labor cost using Service Contract Act determinations.
- Step 4: Estimate the price/direct cost ratio.

Example

Assume that you are negotiating a guard service contract for your facility. You have collected information on prices and minimum manning requirements for the guard service contract at your facility for the last three years. The minimum manning requirement for the current contract totals 75,000 hours. The Service Contract Act (SCA) Labor Rate for the current year is \$6.00. What is your estimate of should-pay contract price?

A	B	C	D	E	F
Year	Estimated Direct Labor Hours	SCA Minimum Labor Rate	Estimated Direct Labor Cost	Contract Price	Ratio Price to Direct Labor Cost
1	87,600	\$5.15	\$451,140	\$757,740	1.68
2	78,840	\$5.45	\$429,678	\$717,444	1.67
3	70,040	\$5.50	\$385,220	\$651,043	1.69
Current	75,000	\$6.00	\$450,000		

The estimated direct labor cost for each year (Column D) is calculated by multiplying estimated direct labor hours (Column B) by the the Service Contract Act minimum labor rate (Column C).

The price to direct labor cost ratio (Column F) is calculated by dividing the contract price (Column E) by the estimated direct labor cost (Column D).

The ratios range between 1.67 and 1.69. The average over the three years is 1.68, calculated as follows:

$$(\$757,740 + \$717,444 + \$651,043) \div (\$451,140 + \$429,678 + \$385,220) = 1.68$$

7.5.2 Estimate Should-Pay Price

Estimate Should-Pay Price Once you calculate the ratios, you can use them to estimate should-pay price for similar services in a different time period or in a different location.

Example Using the ratios from the previous example, you can calculate a should-pay price for the current year.

A	B	C	D	E	F
Year	Estimated Direct Labor Hours	SCA Minimum Labor Rate	Estimated Direct Labor Cost	Contract Price	Ratio Price to Direct Labor Cost
Current	75,000	\$6.00	\$450,000	?	?

A reasonable price range for the new contract is \$751,500 to \$760,500, calculated as follows:

Low side: 1.67 **X** \$450,000 = \$751,500

High side: 1.69 **X** \$450,000 = \$760,500

Mean: 1.68 **X** \$450,000 = \$756,000

- Caveats
1. The ratios are based on historical experience. They are really a way to compare a new proposed price to prices paid in the past for similar work.
 2. For ratio analysis to work, the contracts must (a) be for the same type of services and (b) require the same relative labor content.
 3. Only use contracts with fair and reasonable prices for this analysis. If you suspect that a prior contract's price was unreasonably low or high, do not use data from that contract in developing the ratios.
-

Purchase Widgets (Cont.)

Use of two of the quantitative techniques presented in the chapter enabled you to develop more information about price reasonableness.

While prices on the two purchases appeared to indicate that unit price was constant at \$1,000, adjusting the prices for overall market price changes shows that relative price declined with increased quantity.

Unfortunately, the limited information available does not permit you to make a realistic estimate of what the current price should be. However, the offered unit price of \$970 is less than the adjusted unit prices from past purchases.

CHAPTER 8

ACCOUNT FOR DIFFERENCES

Learning Objectives

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective 8/1

Identify and account for significant differences (if any) between estimated "Should Pay" prices and offered prices, including:

Vendor differences:

- Responsibility
- Understanding of the Requirements
- Technology
- Efficiency
- Strategy
- Mistakes

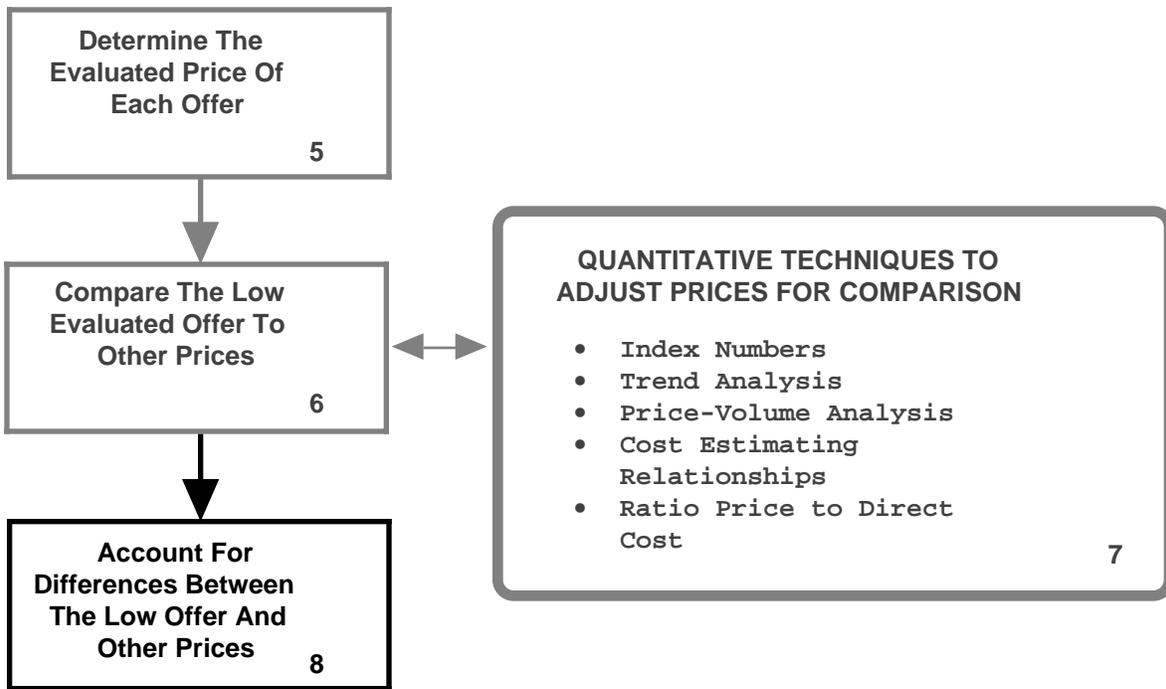
Market differences:

- Market Conditions
 - Defective Specifications
 - Contract Terms
-

Procedural Steps

Procedural Steps The following figure shows where this chapter fits into the conduct of a price analysis.

STEPS IN ANALYZING PRICES (Chapters 5 - 8)



Chapter Overview

Introduction

In Chapter 6, you learned about five general types of comparisons that can be used in price analysis:

- Comparisons of prices offered in response to the solicitation.
- Comparisons with commercial prices, including:
 - Catalog prices.
 - Market prices.
 - Regulated prices.
- Comparisons of prior prices offered and prior contract prices with current prices for the same or similar end items.
- Comparisons of offered prices against estimates from the application of pricing yardsticks (such as dollars per pound or dollars per horsepower).
- Comparisons of offered prices against independent Government estimates.

In chapter 7 you learned how to apply a variety of quantitative techniques that may be required to adjust a particular comparison base so that it can be used effectively in price analysis.

In this chapter, you will learn how to account for significant differences between the low offer and your estimates of the “should-pay” price.

Apply More Than One Comparison Base

Use more than one of the above comparison bases in your price analysis whenever possible. Do this even when price competition appears to be “adequate,” in terms of exempting the low offeror from the requirement to submit certified cost or pricing data. Remember, competitive prices are not always fair and reasonable.

When you make more than one type of price comparison, you may get different estimates of the price you should be willing to pay. Moreover, the low offer may depart significantly from those estimates.

Example

The Government estimate for a particular item is \$70,000. Analysis based on historical prices indicates that the price should be \$75,000. The low competitive offer is \$84,000.

Can this happen? *Yes, and it often does!* In such situations, you need to identify the circumstances that may have caused it to happen.

(Continued on next page)

Chapter Overview (Continued)

When To Account For Differences

If the low offer is at or near your estimates of the “should pay” price, do not be overly concerned about relatively small differences between the low offer and other estimates. However, you should attempt to account for differences between offers and your estimates when:

- The low offer is substantially below all other offers.
- The low offer is substantially below your best estimate of a “should-pay” price.
- The low offer is substantially higher than your best estimate of a “should-pay” price.

Such discrepancies do not necessarily mean that the low offer is unreasonable. Depending on the reasons for the discrepancy, you might determine:

- That the low offer is unreasonable, **OR**
- That the low offer is reasonable notwithstanding the discrepancies, **OR**
- That the discrepancies result from problems with the solicitation or other mistakes on the part of the Government that need to be corrected through such methods as canceling and resoliciting.

In this chapter, you will learn about some of the most common reasons for differences between the low offer and comparable prices. In Chapters 9 and 10, you will learn more about the actions you should take after determining the reasons for these differences.

SECTION	DESCRIPTION	SEE PAGE
A	8.1 Reasons for Differences	8-7
	8.1.1 Vendor Differences	8-8
	8.1.2 Market Differences	8-18

Purchase Widgets (Cont.)

Now you have several price comparisons to consider in your analysis of offered widget prices.

- *Competitive prices — The offeror in line for award was selected from four responsive, responsible firms. The firm's unit price, \$970, was the lowest evaluated price, after consideration of quality related costs.*
- *Catalog prices — The catalog price of another offeror was \$925 per unit. That firm offered an even lower price on this procurement, but after consideration of quality-related costs this firm received a higher evaluated price.*
- *Historical prices — The historical price for smaller quantities was \$1,000. Adjusted for the changing value of the dollar, the prices today would be \$1,040.12 per unit for 25 units, and \$1,033.21 per unit for 40 units.*
- *Government estimate — The Government estimate was based on the last price paid, \$1,000.*

Taken together, these comparisons support the overall reasonableness of the offer in line for award.

What if the comparisons did not support the price reasonableness of the current offers? What if they indicated that the price was 30 percent too high? Should you accept the price anyway? Should you automatically reject all offers?

Before you take any action, you should attempt to determine the reasons for any differences. This chapter will present some of the most common reasons that you should consider.

SECTION A

8.1 REASONS FOR DIFFERENCES

Overview

In this Section

In this section, you will learn the most common reasons for differences between the low offer, other offers, and various estimates of reasonable prices. These reasons generally fall into one of two categories:

TOPIC	SEE PAGE
8.1.1 Vendor Differences	8-8
8.1.2 Market Differences	8-18

8.1.1 Vendor Differences

Introduction

As a buyer, you will often look at a source list as a homogeneous group of firms. However, the firms have different personalities just as people do, with different needs and wants. These differences manifest themselves in the prices bid/offered, as well as in the way in which each firm will perform any contract awarded.

Definition -
Vendor
Differences

Vendor differences are circumstances that result primarily from the action or inaction of an individual firm. These circumstances include differences in vendor:

- Responsibility
 - Understanding of the requirements
 - Technology
 - Efficiency
 - Strategy
 - Mistakes
-

8.1.1 Vendor Differences - Responsibility

Price Analysis
and Respon-
sibility

FAR
15.608(a)(1)

The FAR requires contracting officers to use cost or price analysis “to evaluate the cost estimate or price, not only to determine whether it is reasonable, but also to determine the offeror's ability to perform the contract.”

There may be a direct connection between the low price and the firm's ability to perform. The firm's price may be so attractive because the firm does not understand the contract requirements, or, because it does not have the required investment in technology and equipment to perform the contract.

You must always remember that a contractor who cannot perform is never a good deal at any price.

FAR 9.103

In the words of the FAR, “The award of a contract to a supplier based on lowest evaluated price alone can be false economy if there is subsequent default, late deliveries, or other unsatisfactory performance resulting in additional contractual or administrative costs. While it is important that Government purchases be made at the lowest price, this does not require an award to a supplier solely because that supplier submits the lowest offer. A prospective contractor must affirmatively demonstrate its responsibility...”

Hence, if the low offer is significantly lower than other offers or your estimate of the “should-pay” price, the burden is on the offeror to affirm its ability to perform at that price. In sealed bidding, a “mistake in bid” procedure has been established in part to provide you with an opportunity to verify that a bidder can perform at a price that is greatly out of line with other bids (more on this in Chapter 9). In negotiated procurements, you can directly ask the offeror to affirm its ability to perform at the proposed price during discussions (more on this in Chapter 10).

Effect on
Contract Pricing

Your decision on offeror responsibility may affect your ability to award on the basis of price analysis. If only one offeror is responsible, you do not have “adequate price competition”—regardless of how many offers you have received from nonresponsible firms. You therefore may have to require the submission of certified cost or pricing data by the responsible offeror. If the contract is under the dollar threshold for certified data, you still may need to request and analyze cost data as the only basis for verifying the reasonableness of the offer

8.1.1 Vendor Differences - Understanding the Requirements

Introduction

FAR
15.608(a)(1)

The price bid/offered by a firm represents the firm's **understanding of the contract requirements**. Even with a responsible firm and good specifications and drawings, misunderstandings and varying interpretations are possible. The FAR requires contracting officers to use price analysis “to evaluate the cost estimate or price, not only to determine whether it is reasonable, but also to determine the offeror's understanding of the work...”

Misunderstandings

Misunderstandings are particularly likely to occur in situations where the solicitation contains unusual requirements that are different from what the offerors typically see in solicitations for similar requirements. The unusual requirement could be the inclusion of unique specifications in the solicitation, or a change in requirements since the last similar contract. For example, there could be a change from a Federal Specification to a commercial purchase description for an item. Some firms may not recognize the change and continue to price based on the superseded Federal Specification. Others will recognize the change and price based on the actual solicitation requirements.

Varying Interpretations

Varying interpretations are particularly likely to occur in situations where performance specifications are used to define the Government's requirements. For example, assume that the specification requires the successful contractor to "provide an eight-ounce personal coffee container." One offeror could interpret the requirement to mean "provide an eight-ounce ceramic mug." Another offeror could interpret the same requirement to mean "provide an eight-ounce paper cup."

Effect on Contract Pricing

The effect of either misunderstandings or varying interpretations of specification requirements may be wide differences in prices. Not only will prices be different from each other, they may also be different from the comparison bases used for price analysis.

Misunderstandings

A firm that does not understand that the solicitation requirements have changed will offer a price based on its expectations about the contract requirements. In the example above, a firm that continued to price based on the Federal Specification will likely offer a higher price than a firm who did identify the change to a commercial specifications.

(Continued on next page)

8.1.1 Vendor Differences - Understanding the Requirements (Continued)

Effect on
Contract Pricing
(Cont.)

Varying Interpretations

A firm that devises a more costly solution to meet the requirements of a performance specification will offer a higher price than a firm who devised a simpler solution. In the example above, the paper cup will be substantially cheaper than the ceramic mug. However, the reasonableness of the price of the paper cup cannot be based on a competitive price comparison with the price of a ceramic mug. Comparisons with other bases for price analysis may also be complicated by similar differences in interpretation of the specification.

8.1.1 Vendor Differences - Technology

Introduction

Pricing differences may involve technology in differences related to:

- The acquisition of new technology
 - The type of technology currently available.
-

Acquisition of
New Technology

If a new product or production technology must be acquired, there will be an effect on contract price. Some firms may have the required technology, while others may not.

Product Technology. If the product technology is within a firm's existing capabilities, it will not need to conduct expensive research and development or purchase the technology from other firms.

Production Technology. If a unique production technology, required for contract performance, is currently available to a firm, it will not need to invest in new plant and equipment to perform the contract. If the technology is not available, investment, or possibly expensive subcontracting, will be required. There may also be schedule delays during the period that the firm is acquiring the new technology. Dealing with the effects of schedule delays may further increase the cost of the contract.

Use of
Currently
Available
Technology

Differences in the cost patterns in the use of available production technology can also affect contract price. As you learned in Chapter 5, firms can produce the same product with different types of equipment and different related costs. One firm may use a labor-intensive method of production, and, as a result, have a low fixed cost of production. Another firm might have an automated facility with high fixed costs of production and high set-up costs. For small quantities, the labor intensive firm will have the lower cost per unit. For large quantities, the automated firm will have the lower cost per unit because the fixed costs of production are spread over more units.

Effect on
Contract Pricing

Acquisition of New Technology

If costs are increased by the need to acquire new product or production technology, prices are likely to increase to consider increased costs. If the required investment in technology has application to other products produced by the firm, the costs may be shared. If the technology requirements are unique, the costs will have to be charged to a single product.

(Continued on next page)

8.1.1 Vendor Differences - Technology (Continued)

Effect on
Contract Pricing
(Cont.)

If only one firm has the necessary technology, the firm may have a lock on the competition. If prices are held at an artificially high level, expected price reductions from continuing production may not occur.

Use of Currently Available Technology

Differences in production technology may produce prices that are substantially different from what would be expected from analysis of historical prices for substantially different quantities. For smaller quantities, the labor intensive firms may have a competitive advantage. For larger quantities, the automated firm may have a competitive advantage.

8.1.1 Vendor Differences - Efficiency

Introduction

Firms with exactly the same equipment and technology can have substantially different cost structures, even when they are producing exactly the same products.

Efficiency Differences

The differences in cost structures result from operating at different levels of efficiency. Measures of efficiency examine the input, labor, materials, and equipment, required to obtain a given level of output. When compared with less efficient firms, more efficient firms can produce the same amount of product with less input, or more output with the same amount of input.

The difference lies mainly in the organization and operation of the firm's management. Concepts like total quality management have been developed to identify areas of operation that do not add value. The objective is to eliminate non-value-added effort and increase efficiency.

Effect on Contract Pricing

As stated above, efficiency is a comparison of input and output. When you examine a firm's efficiency in producing a product, the comparison is normally made in terms of dollars per unit of output. More efficient firms can produce a product at a lower cost than less efficient competitors. A firm that is substantially more efficient than its competitors can produce a unit of a product at a substantially lower cost. If the firm can produce at a substantially lower cost, it can sell for less and still make a greater profit than its competitors.

8.1.1 Vendor Differences - Strategy

Introduction

As you learned in the Introduction, all firms have the same general pricing objectives:

- To cover costs
- To contribute to attaining corporate operational objectives.

However, different firms have different pricing strategies. And pricing strategies within one firm can change with changes in the product and the market situation.

Strategies

Some bidders/offerors will pursue *cost-based strategies*, such as:

- Mark-up pricing
- Margin pricing
- Rate-of-return pricing

Other bidders/offerors will pursue *market-based strategies*, such as:

- Profit-maximization pricing
 - Market-share (e.g., “Buy-In”) pricing
 - Market skimming
 - Current-revenue pricing
 - Target-profit pricing
 - Promotional pricing
 - Market-competition pricing
-

Effect on Contract Pricing

Each of the 11 different strategies identified above are described in detail in the Introduction. Firms pursuing different pricing strategies may offer different prices, even when they have essentially the same production costs. The three pricing strategies that are particularly likely to cause pricing variations are:

- Market-skimming
- Market-share pricing
- Demand-differential pricing

You should consider differences between these strategies as you analyze price differences.

(Continued on next page)

8.1.1 Vendor Differences - Strategy (Continued)

Market-Skimming

If you know that a particular firm always follows a *market-skimming pricing strategy*, do not be surprised if the firm's price is substantially higher than its competitors in a competitive situation. On the other hand, if a firm that normally pursues a market-skimming strategy offers a price that is substantially lower than that of its competition, your solicitation may have identified a production situation in which the firm has a lock on the competition.

Market-Share (“Buy-In”) Pricing

A firm following a *market-share pricing strategy* may offer a price that is very low compared with other offers in an effort to limit effective competition and win market share. The price may even be below cost.

The Comptroller General has repeatedly dismissed protests against alleged below-cost, "buy-in" bids. In one case (B-238877, Matter of: Diemaster Tool, Inc., April 5, 1990), the Comptroller General noted that a “bidder, for various reasons, in its business judgment may decide to submit a below-cost bid; such a bid is not invalid. ... Whether the awardee can perform the contract at the price offered is a matter of responsibility.”

Hence, when confronted with what appears to be a “buy-in” price, your challenge is to determine whether the price represents an unacceptable performance risk “—i.e., to judge the degree of risk by calculating the extent to which the proposed price falls short of the amount the agency believes is required to perform as proposed” (B-238259, Matter of: Technology Applications, Inc., May 4, 1990).

You must decide whether the firm's market share strategy is too much of a gamble (i.e., Has the firm assumed that it will sell far more units at that price than is probable? Has the firm assumed that its per unit costs will be lower than probable? Has the firm underestimated the financial resources necessary to cover any short-term losses? Has the firm assumed wrongly that financing will be available in the necessary amounts?). Remember, the burden of proof is on the offeror to affirm its responsibility—that is, its ability to perform at the proposed price.

Demand-Differential Pricing

A *demand-differential pricing strategy* may result in significant price fluctuations between buying offices or between different purchases by the same buying office. Special care will be necessary to determine if prices are fair and reasonable in each contracting situation.

8.1.1 Vendor Differences - Mistakes

Introduction Like individuals, businesses, even major corporations, are not perfect, and can make mistakes.

Types of Mistakes You have already considered one form of mistake as part of your consideration of bidder/offeror understanding of the Government requirement. In pricing, you may also see mistakes that involve simple mathematical errors. The more complex the task, the more opportunity there is for error.

Mathematical mistakes still occur, even when prices are prepared by computer. Computers only do what they are programmed to do. If the programming is incorrect, the answer will also be incorrect.

Effect on Contract Pricing Even a simple mathematical error can have a significant effect on contract pricing. Pricing is usually the last step in bid/offer development. In the pressure to submit the bid/offer, the mistake may be missed by the bidder's/offeror's review process.

Example

A construction task requires remodeling of 20 identical buildings. The bidder estimates the price for one building and multiplies the price by 2 instead of 20. The bid price is one-tenth what the estimator meant it to be.

8.1.2 Market Differences

Introduction Just like vendor differences, market differences can also affect prices.

Definition -
Market
Differences **Market differences** are circumstances that are beyond the control of an individual firm and that affect all firms, but not always in the same way. Such circumstances include:

- Market Conditions
 - Defective Specifications
 - Contract Terms
-

8.1.2 Market Differences - Market Conditions

Definition -
Market
Condition

A **market condition** is any factor that affects the conditions under which products are bought and sold.

Differences in
Market
Conditions

In Chapter 6, you learned the importance of considering changes in the contracting situation and in general economic conditions, whenever you are using historical prices as a comparison base for determining price reasonableness.

Three circumstances are worthy of special consideration:

- Changes in the level of competition
 - Limited competition and collusion
 - Differing economic conditions
-

Changes in the
Level of
Competition

Changes in the level of competition can affect the pricing strategy of bidders/offerors. If competition decreases from historical levels, firms typically will be less concerned about the threat of price competition. If the level of competition increases, firms will be more concerned.

Limited
Competition and
Collusion

In Government contracting, you normally assume that you have adequate price competition whenever there are two or more bids/offers. You must be careful in assuming competition, particularly in situations where there are only two or three firms that can meet Government requirements.

Limited competition encourages collusion. Any agreement or mutual understanding among competing firms that restrains the natural market forces should be considered collusion. The understanding does not have to be the result of an active agreement. It can be a passive understanding that aggressive competition will lower profit margins for all competitors without increasing volume for any single competitor. As long as each firm gets its "fair share" of the business, all the firms can increase profit by not competing aggressively.

(Continued on next page)

8.1.2 Market Differences - Market Conditions (Continued)

Limited
Competition and
Collusion
(Cont.)

FAR 3.303 (c)

You may find that it is often difficult to detect collusion and antitrust law violations. Practices or events that may evidence violation of antitrust laws include:

- The existence of an "industry price list" or "price agreement" to which contractors refer when formulating offers.
- A sudden change from competitive bidding to identical bidding.
- Simultaneous price increases or follow-the-leader pricing.
- Rotation of bids or proposals, so that each competitor takes a turn in sequence as low bidder, or so that certain competitors bid low only on some sizes of contracts and high on other sizes.
- Division of the market, so that certain competitors bid low only for contracts let by certain agencies, or for contracts in certain geographical areas, or on certain products, and bid high on all other jobs.
- Establishment by competitors of a collusive price estimating system.
- The filing of a joint bid by two or more competitors when at least one of the competitors has sufficient technical capability and productive capacity for contract performance.
- Any incidents suggesting direct collusion among competitors, such as the appearance of identical calculation or spelling errors in two or more competitive offers or the submission by one firm of offers for other firms.
- Assertions by the employees, former employees, or competitors of offerors, that an agreement to restrain trade exists.

Differing
Economic
Conditions

A firm can have a competitive advantage because of the economic conditions in the area in which it operates. In Chapter 7, you learned how to use index numbers to adjust historical prices for inflation. The emphasis was that published indexes are based on averages. Obviously, when you deal with averages, some will be above the average and others below. Some may be significantly below the average.

(Continued on next page)

8.1.2 Market Differences - Market Conditions (Continued)

Effect on
Contract Pricing

Changes in the Level of Competition

Changes in the level of competition will affect the accuracy of price estimates based on historical prices. As firms become less concerned about competition, prices may be expected to increase faster than market averages. As firms become more concerned about competition, price increases may be slower than market averages.

Limited Competition and Collusion

Collusion, active or passive, will increase prices. Carefully review any of the practices or events that may indicate evidence of violation of the antitrust law. Some events such as certain competitors being low only for contracts let by certain agencies, or for contracts in certain geographical areas, or on certain products, and high on all other jobs, may have economic explanations other than collusion. If your review confirms collusion, you should report your conclusions to the U.S. Department of Justice, as required by FAR 3.303 (f).

FAR 3.303 (f)

Differing Economic Conditions

Differences in the area economic conditions can have a significant effect on production costs, including labor rates and material costs. Depressed economic conditions in an area can lower costs, such as those associated with high rates of local unemployment. Depressed sales can make suppliers more willing to cut prices to make a sale. Lower labor and material costs will permit a firm to produce a product more cheaply than its competitors operating in areas with better general economic conditions.

8.1.2 Market Differences - Defective Specifications

Definition -
Defective
Specification

The term **defective specifications** includes more than just specifications. It includes any element of the solicitation or contract that defines what the contractor must do to complete the contract successfully.

Nature of
Defective
Specifications

The different elements of the solicitation are termed defective when they do not adequately describe contract requirements. A contract should define, *who, what, when, where, and how* for any task that must be performed under the contract. If the contract is not clear, or the requirements are open to interpretation, widely different interpretations may result. If the terms conflict, the contract may be impossible to perform.

Effect on
Contract Pricing

If specifications are unclear or conflict, firms may attempt to guess what the Government really wants. Some may underestimate, and others may overestimate actual requirements. The result may be a wide range of prices, depending on the interpretation of the individual bidder/offeror.

Some firms may even attempt to "game" the bid/offer by assuming the lowest requirement possible in the belief that a contract change will be required to correct the conflict. Remember; the judges normally interpret disputes over contract ambiguities and conflicts against the writer of the contract, which is the Government.

8.1.2 Market Differences - Contract Terms

Changes in
Contract Terms

Changes in contract terms can be particularly important when you use historical prices as a comparison base to determine price reasonableness. Changes in type of contract, f.o.b. point, delivery requirements, quantities, and other terms can affect the contractor's cost and risk.

Effect on
Contract Pricing

Any element that will affect contractor cost or risk will also affect contract price. Changes from historical contract terms that increase cost or risk should increase price. Changes from historical terms that decrease cost or risk should decrease contract price.

Differences and Comparison Estimates Affected

Summary

The following table summarizes potential reasons for significant differences between offered prices and your estimate of the "should pay" price.

Potential Reasons	If the offer in line for award is substantially:		
	Lower than other competitive offers	Lower than expected*	Higher than expected*
Vendor not responsible	X	X	
One or more vendors misunderstand the requirement	X	X	X
Only one vendor has necessary technology	X		X
No vendor has the necessary technology			X
Some vendors are more efficient than others		X	
One vendor is far more efficient than others	X	X	
One or more vendors has a market strategy other than merely recovering costs at a reasonable profit.	X	X	X
Vendor has made a mistake in pricing	X	X	
Demand is falling relative to supply		X	
Demand is rising relative to supply			X
The Government has entered the market at the wrong point in its cycle			X
Vendors are in collusion			X
Some vendors are located in localities with depressed economic conditions		X	
The specification is defective		X	X
Relative to commercial terms or past contracts, the IFB or RFP's terms increase the contractor's risks and/or impose extra costs			X

* Based on comparison with Should-Pay prices developed using historical prices, commercial prices, Government estimates, or CERs.

Purchase Widgets (Cont.)

The chapter has presented some of the most common reasons for differences between offers and buyer-developed Should- Pay prices. They are not an end-all for analysis; they are a starting point.

*Do not let analysis paralyze you and prevent you from making a decision. At the same time, unsupported differences of several thousand dollars, or large percentage differences from Should-Pay estimates, should not be accepted until you **UNDERSTAND** why the differences exist.*

CHAPTER 9

PRICE-RELATED DECISIONS IN SEALED BIDDING

Learning Objectives

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective 9/1

Determine whether to reject a bid that is unreasonably low or materially unbalanced.

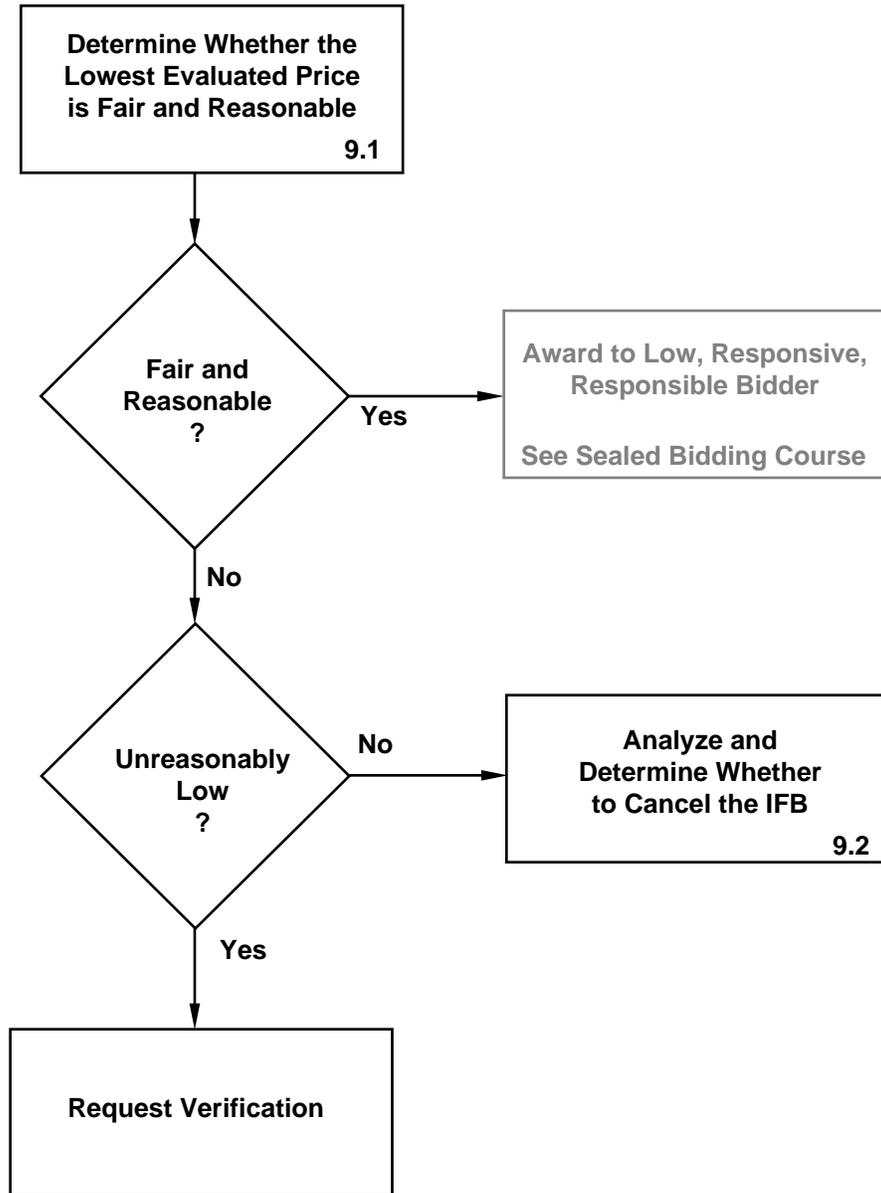
Classroom Learning Objective 9/2

Identify the price-related reasons for cancelling an IFB.

Procedural Steps

Procedural Steps

The following figure shows the sequence of events or steps that you should follow to make price-related decisions in sealed bidding.



Chapter Overview

Introduction

FAR 14.404-1
and 404-2

To maintain the integrity of sealed bidding as a method of procurement, you must award to that responsible bidder which submitted the lowest responsive bid, as determined by applying the IFB's price-related factors. However, this general rule does not hold if you have reason to believe that the low bid is:

- The result of a mistake by the bidder,
- Materially unbalanced, or
- Otherwise unreasonable as to price.

In this Chapter

In this chapter you will learn how to:

SECTION	DESCRIPTION	SEE PAGE
A	9.1 Examine Individual Bids	9-5
	9.1.1 Suspected Mistakes in Bids	9-6
	9.1.2 Unbalanced Bids	9-13
B	9.2 Determine Need to Cancel the IFB	9-15
	9.2.1 Price-Related Reasons for Cancelling the IFB	9-16
	9.2.2 Negotiation After Cancellation	9-22

Purchase Widgets (Cont.)

Now you have completed your price analysis. It is time to use your analysis in making pricing-related decisions. The decisions that you must make will depend in part on whether you are contracting using sealed bidding or negotiation.

If you are contracting using sealed bidding, you will normally award the contract to the responsive, responsible bidder with the lowest evaluated price. For example, if you were using sealed bidding procedures in your widget purchase, you would likely award based on your price analysis.

However, there are situations where the Government must reject a low bid or cancel an entire invitation for bids for pricing-related reasons. In this chapter, you will learn what you can do in these situations. For example:

- What should you have done if your estimated Should-Pay price per widget was \$1,500 and the low offer \$970?*
- What should you have done if your estimated Should-Pay price per widget was \$650 and the low offer \$970?*

In Chapter 9, you will learn about the pricing-related decisions that you must consider when contracting using sealed bidding procedures.

SECTION A

9.1 EXAMINE INDIVIDUAL BIDS

Overview

In this Section

This section covers the following topics:

TOPIC	SEE PAGE
9.1.1 Suspected Mistakes in Bids	9-6
9.1.2 Unbalanced Bids	9-13

9.1.1 Suspected Mistakes in Bids

Introduction

FAR 14.404-2(f)

What if the low bid is well below all other bids? What if the low bid is well below your estimate of the should-pay price? The FAR states that “any bid may be rejected if the contracting officer determines in writing that it is unreasonable as to price. Unreasonableness of price includes not only the total price of the bid, but the prices for individual line items as well.” To determine whether an unexpectedly low bid is unreasonable, use the FAR “mistake in bid” procedure.

Examining Bids for Mistakes

FAR 14.406

After the bid opening, examine all bids for mistakes. Mistakes are of two kinds:

- Apparent clerical errors, and
- Other indications of error — such as a bid price that is far out of line with other bids or with the dollar amount determined by the contracting officer to be reasonable.

If you suspect that the bidder has erred, request verification of the bid from the bidder. This is your opportunity to talk with (and even meet) the bidder to find out why the bid price is so low (i.e., which of the reasons in Chapter 8 accounts for the unexpectedly low price). The bidder may, at this point, admit to having made a mistake in preparing the bid. Or the bidder may stand by the bid price. In either case, the burden of proof is on the bidder.

Correcting Apparent Clerical Errors

FAR 14.406-2

When you examine bids, you may spot a clerical error apparent on the face of the bid. Examples of apparent clerical errors:

- Obvious misplacement of a decimal point.
- Obviously incorrect discounts (e.g., 1% 10 days, 2% 20 days, 5% 30 days).
- Obvious reversal of the price f.o.b. origin, and the price f.o.b. destination.

The contracting officer may correct, before award, any clerical error which is apparent on the face of the bid. Steps:

1. Ask the bidder to verify the intended bid.
 2. Attach the bidder's verification to the original bid and a copy of the verification to the duplicate bid.
 3. Reflect the corrected price in the award document.
-

(Continued on next page)

9.1.1 Suspected Mistakes in Bids (Continued)

Other Suspected
or Alleged
Mistakes

FAR 14.406-
3(g)(1)

If you suspect that the bidder made a less obvious mistake, such as grossly underestimating the cost of doing the work, immediately ask the bidder to verify the bid. This action must be sufficient to reasonably assure that the bid is correct or to elicit an admission of a mistake by the bidder.

To put a bidder on notice of this sort of mistake, advise the bidder, as appropriate, that “your bid is so much lower than the other bids or the Government's estimate as to indicate the possibility of error.” Also point to facts about the solicitation that might have been overlooked by the bidder in preparing the bid, such as:

- Important or unusual characteristics associated with the specifications,
- Changes in the requirements since the last purchase, or
- Any other information, proper for disclosure, that lead you to suspect a mistake.

After you have raised the possibility of a mistake to the bidder, the bidder may take one of three courses of action:

- Allege that a mistake was made and request permission to correct the mistake.
- Allege that a mistake was made and request permission to withdraw the bid.
- Verify the original bid.

Clear and
Convincing
Evidence

FAR 14.406-
3(g)(2)

If a bidder alleges that a mistake was made, the bidder must submit a written request to withdraw or modify the bid supported by statements (sworn, if possible) and by clear and convincing evidence of the mistake.

What constitutes clear and convincing evidence?

All pertinent evidence establishing the existence of the error, the manner in which it occurred, and the bid actually intended. Examples of such evidence:

- The bidder's file copy of the bid.
- The original work sheets and other data used in preparing the bid.
- Subcontractors' quotations, if any.
- Published price lists.

(Continued on next page)

9.1.1 Suspected Mistakes in Bids (Continued)

Bidder Requests
Correction

The following table documents authorized Government courses of action, given the circumstances of the alleged mistake.

FAR 14.406-3

BIDDER REQUESTS PERMISSION TO CORRECT THE MISTAKE		
SITUATION	IF	THEN
1	You have clear and convincing evidence of a mistake AND You have clear and convincing evidence of the bid intended AND Lower bidders would NOT be displaced by the correction	Agency head, or delegated official, may permit the bidder to CORRECT the mistake.
2	You have clear and convincing evidence of mistake AND You have clear and convincing evidence of the bid intended AND Lower bidders WOULD BE DISPLACED by the correction AND Existence of the mistake and the bid intended ARE ASCERTAINABLE substantially from the invitation and the bid itself	Agency head, or delegated official, may permit the bidder to CORRECT the mistake.
3	You have clear and convincing evidence of mistake AND You have clear and convincing evidence of the bid intended AND Lower bidders WOULD BE DISPLACED by the correction BUT Existence of the mistake and the bid intended are NOT ASCERTAINABLE substantially from the invitation and the bid itself	The bidder SHALL NOT BE PERMITTED TO CORRECT the mistake.

(Table continued on next page)

9.1.1 Suspected Mistakes in Bids (Continued)

Bidder Requests
Correction
(Cont.)

Continuation of the table documenting authorized Government
courses of action, given the circumstances of the alleged mistake:

BIDDER REQUESTS PERMISSION TO CORRECT THE MISTAKE		
SITUATION	IF	THEN
4	You have clear and convincing evidence of mistake AND There is NO clear and convincing evidence of the bid intended	An official above the contracting officer may permit the bidder to WITHDRAW the bid.
5	The evidence reasonably supports the existence of the mistake but is NOT clear and convincing.	An official above the contracting officer may permit the bidder to WITHDRAW the bid.
6	The evidence does NOT reasonably support the existence of a mistake AND The contracting officer has determined that the bid price is reasonable	Agency head, or delegated official, may determine that bid be NEITHER WITHDRAWN NOR CORRECTED.

9.1.1 Suspected Mistakes in Bids (Continued)

Bidder Requests
Withdrawal

The following table documents authorized Government courses of action, given the listed circumstances of the alleged mistake:

FAR 14.406-3

BIDDER REQUESTS PERMISSION TO WITHDRAW THE BID		
SITUATION	IF	THEN
1	You have clear and convincing evidence of mistake AND You have clear and convincing evidence of the bid intended AND The bid, both as corrected and uncorrected, is the lowest received.	The agency head, or delegated official, may determine to CORRECT the bid and NOT PERMIT WITHDRAWAL .
2	You have clear and convincing evidence of mistake BUT Evidence of the bid intended is NOT clear and convincing	An official above the contracting officer may permit the bidder to WITHDRAW the bid.
3	The evidence reasonably supports the existence of the mistake but is NOT clear and convincing	An official above the contracting officer may permit the bidder to WITHDRAW the bid.
4	The evidence does NOT reasonably support the existence of the mistake AND The contracting officer has determined that the bid price is reasonable	Agency head, or delegated official, may determine that bid be NEITHER WITHDRAWN NOR CORRECTED .

9.1.1 Suspected Mistakes in Bids (Continued)

Bidder Verifies Bid as Submitted

The following table documents authorized Government courses of action:

BIDDER VERIFIES BID AS SUBMITTED		
SITUATION	IF	THEN
1	The bidder verifies the original bid and denies that a mistake was made.	Accept or reject the bid as originally submitted.

Considering "Verified" Bids

FAR 14.406-3(g)(5)

If the bidder verifies the original bid or fails to furnish evidence to support an alleged mistake, you must consider the bid as originally submitted unless you are justified in concluding that accepting it would be "unfair to the bidder or to other bona fide bidders". Such a conclusion is justified when either of the following is true:

- The dollar amount of the bid is far out of line with:
 - The dollar amounts of other bids received, or
 - The Government price estimate, or with
 - The dollar amount determined by the contracting officer to be reasonable.
- There are other clear indications of error, such as contractor inability or unwillingness to:
 - Demonstrate a clear understanding of contract requirements.
 - Present original work sheets that support the reasonableness of the bid price.
 - Explain how the work can be completed at the bid price.

Attempts made to obtain the information required, and the action taken with respect to the suspect bid, must be fully documented.

(Continued on next page)

9.1.1 Suspected Mistakes in Bids (Continued)

Examples

The following are summaries of two Comptroller General decisions.

1. Pamfilis Painting, Inc. (Comp Gen, B-237968, April 3, 1990)

The contracting officer suspected a mistake in Pamfilis's bid because it was 44% below the government estimate. Three bid verification meetings were held with Pamfilis. During these meetings, agency officials reviewed the contract requirements, specifications, government estimate, and bid submission with Pamfilis to ensure that the firm's bid represented a clear understanding of the scope of work. It became apparent that Pamfilis did not understand the requirements of the IFB. As a result, Pamfilis had not priced several essential items of work required by the IFB, and the bid contained numerous errors based on Pamfilis's erroneous interpretation of the IFB. The contracting officer rejected Pamfilis's bid.

The Comp Gen concluded that "A contracting officer's decision to reject an apparently mistaken bid under ... [FAR] 14.406-3(g)(5) is subject to question only where it is shown to be unreasonable. See TLC Financial Group, B-237384, Jan. 26, 1990, 90-1 CPD P 116; Veterans Administration- Advance Decision, B-225815.2, Oct. 15, 1987, 87-2 CPD P 362. Moreover, an obviously erroneous bid may not be accepted even if it is verified by the bidder." (emphasis added).

2. TLC Financial Group (Comp Gen, B-237384, Jan. 26, 1990)

TLC bid \$500,000 for a line item. This bid was 68% below the Government estimate and 64% below the second low bid. Government officials met with TLC officials, to verify whether TLC's bid was based on a full understanding of the scope of work and to review work sheets used by TLC to calculate its bid price.

Despite several requests, TLC did not submit its bid work sheets. However, based on information contained in TLC's bid and discussions at the meeting, the contracting officer determined that TLC had misinterpreted the scope of work required by the IFB, resulting in an unrealistically low bid.

The contracting officer concluded that TLC's bid was clearly a mistake and determined that award to TLC would be unreasonable and unfair to the other bidders under FAR 14.406-3(g)(5). The Navy therefore rejected TLC's bid. The Comptroller General upheld Navy's decision.

Determine the Reasonableness of a Low Bid

As in the above cases, bid verification gives you the opportunity to investigate the reasons for a bid that is "far out of line" with other bids or your "should pay" estimate. Reject such a bid when the evidence supports a finding that the bidder is nonresponsive, misunderstands the requirement, or has underestimated the costs and risks of performance. Accept the bid when the evidence establishes that the bidder can ably perform at the price bid (e.g., because the bidder is the most efficient performer or has knowingly submitted a below-cost bid and has the financial reserves to cover probable losses). You may have to cancel the IFB if your investigation uncovers a Government mistake (e.g., use of a defective specification) — as discussed in section 9.1.3.

9.1.2 Unbalanced Bids

Introduction

You must analyze bids to determine if they are unbalanced with respect to:

- The total price of the bid, or
- Separately priced line items.

This is particularly important when evaluating the:

- Price for first article tests, or test items, in comparison with the price for production units.
 - Prices for options in comparison with the prices for the basic contract requirements.
-

Reject Materially Unbalanced Bids

You may reject materially unbalanced bids. A bid is **materially unbalanced** IF it is mathematically unbalanced AND one of the following is true:

FAR 14.404-2(g)

- There is reasonable doubt that the lowest evaluated bid will actually result in the lowest cost to the Government.
- The offer is so grossly unbalanced that its acceptance would be tantamount to allowing an advanced payment.

A bid is **mathematically unbalanced** IF it is based on prices that are significantly less than cost for some line items AND significantly more than cost for other line items.

Identification of Materially Unbalanced Bids

In sealed bidding, you must normally use price analysis to determine if bids are materially unbalanced. The following examples demonstrate the use of price analysis tools to determine if bid prices are materially unbalanced for a contract requiring both first article testing and production.

Examples

Compare all bids to determine if the structure of any bid differs significantly from the structure of other bids concerning the pricing for first articles and production units. For example, does one bid contain a first article price that is significantly greater than other bids, while production units are significantly cheaper?

Compare the production unit price with the price of similar production units.

(Continued on next page)

9.1.2 Unbalanced Bids (Continued)

Identification of Materially Unbalanced Bids	<p><u>Examples (Cont.)</u></p> <p>Compare the difference between the first article price and the production unit price, with the price differences experienced between first article and production units on contracts for similar items.</p> <p>Compare the difference between the first article price and the production unit price, with the Government estimate of the price of first article test effort, excluding the price of the units required for test.</p> <p>Compare the price for the first article and the price for production units with the Government estimates.</p>
Unbalanced Bid Rejection Decision	<hr/> <p>You should carefully document your analysis of bids that appear to be materially unbalanced. This documentation will form the basis for any determinations and Government actions. If analysis supports a determination that the bid is materially unbalanced, you may reject the bid.</p> <p>FAR 14.404-2(g)</p> <p>If you accept the bid and questions arise later during contract performance, the documentation will provide information on the facts that were considered during analysis.</p>
Example of Materially Unbalanced Bid	<hr/> <p>In the case of Person System Integration, Ltd., B-236790.2, the Comp Gen found that the PSI bid was unbalanced because the bid was front-loaded. A fixed-price service contract was to be awarded for a firm requirement for a 60-day mobilization period, an initial 10-month option period, 3 subsequent option years, an additional 10-month option period, and a final 60-day transition option period.</p> <p>The Comp Gen found that PSI's price for the 60-day mobilization period was 63 percent of the price for a 1-year performance period and 22 percent of the potential 5-year contract. PSI stated that the amount included the cost of extensive advance purchases of replacement parts. However, the Comp Gen found the amount to be so far in excess of the actual value of the items or services to be provided that acceptance of the bid would provide a disincentive for the Government to administer (i.e., terminate) the contract after the enhanced payments were made.</p> <hr/>

SECTION B

9.2 DETERMINE NEED TO CANCEL THE IFB

Overview

In this Section

This section covers the following topics:

TOPIC	SEE PAGE
9.2.1 Price Related Reasons for Cancelling Bids	9-16
9.2.2 Negotiation After Cancellation	9-22

9.2.1 Price Related Reasons for Cancelling Bids

Reasons for
Cancelling IFBs

FAR 14.404-1(b)
and (c)

Under the provisions of FAR 14.404-1(b) and (c), quoted below, there are eleven possible reasons for cancelling an IFB after bid opening. The highlighted subparagraphs show that five of the eleven are pricing-related:

- (b) When it is determined before award but after opening that the requirements of 10.008 (relating to the availability and identification of specifications) have not been met, the invitation shall be canceled.
- (c) Invitations may be canceled and all bids rejected before award but after opening when, consistent with subparagraph (a)(1) above, the agency head determines in writing that—
 - (1) Inadequate or ambiguous specifications were cited in the invitation;
 - (2) Specifications have been revised;
 - (3) The supplies or services being contracted for are no longer required;
 - (4) The invitation did not provide for consideration of all factors of cost to the Government, such as cost of transporting Government-furnished property to bidders' plants;**
 - (5) Bids received indicate that the needs of the Government can be satisfied by a less expensive article differing from that for which the bids were invited;**
 - (6) All otherwise acceptable bids received are at unreasonable prices, or only one bid is received and the contracting officer cannot determine the reasonableness of the bid price;**
 - (7) The bids were not independently arrived at in open competition, were collusive, or were submitted in bad faith (see Subpart 3.3 for reports to be made to the Department of Justice);**
 - (8) No responsive bid had been received from a responsible bidder;
 - (9) A cost comparison as prescribed in OMB Circular A-76 and Subpart 7.3 shows that performance by the Government is more economical;
or**
 - (10) For other reasons, cancellation is clearly in the public's interest.

9.2.1 Price Related Reasons for Cancelling Bids (Continued)

Situations Requiring Cancellations

The following table summarizes the five price-related reasons for cancelling the bid after bid opening (FAR 14.404-1(b) and (c)), how to avoid each situation and analyze it when it occurs.

POSSIBLE CANCELLATION SITUATION	AVOIDING THE SITUATION	ANALYZING THE SITUATION WHEN IT OCCURS
<p>IFB DID NOT CONSIDER ALL FACTORS OF COST</p>	<p>In Chapters 4 and 5, you learned about selecting and applying price-related factors in making the award decision. In preparing a solicitation, you should consider the principles presented in those two chapters. Doing so should help you avoid most situations in which you must cancel an IFB for failing to properly consider all factors of cost to the Government.</p> <p>During the solicitation period, you must be alert to price-related factors that are not considered in the solicitation. Carefully review comments and questions received from potential bidders to identify such factors.</p>	<p>In price analysis, you must apply the price-related factors included in the award criteria.</p> <p>During your analysis, you must be alert to identifying price-related factors that were not properly considered in developing the award criteria and to identifying important price-related factors that were not considered at all.</p>
<p>GOVERNMENT NEEDS CAN BE SATISFIED WITH LESS EXPENSIVE PRODUCT</p>	<p>Chapter 1 described the need to establish a best estimate of price or value as part of acquisition planning. In that process, you should carefully review the purchase request estimate, analyze market data and acquisition histories, and identify and collect other related pricing data. During that review, you must be alert to alternative products that will meet Government needs at a lower total cost.</p> <p>If you identify a lower priced product, coordinate with the requiring activity to assure that the product is acceptable. If it is, assure that the solicitation is modified to permit bidders to furnish the product identified.</p> <p>In Chapter 2, you learned about factors to consider in developing solicitations that:</p> <ul style="list-style-type: none"> • maximize competition • maximize use of commercial products, and • eliminate unnecessary costs. <p>During the solicitation period, you must be alert to alternative products identified by potential bidders and other sources.</p>	<p>During your efforts to determine price reasonableness, you should consider pricing yardsticks and cost estimating relationships based on the prices of similar items. You may also request Government technical personnel to perform a visual or value analysis.</p> <p>Either approach to price analysis could identify a product, other than the product for which bids were solicited, that will meet Government requirements at a lower price.</p> <p>Review the impact of the specification on bids, bearing in mind that revising the specification can be a reason for cancelling the solicitation.</p>

(Table continued on next page)

9.2.1 Price Related Reasons for Cancelling Bids (Continued)

Situations
Requiring
Cancellations
(Cont.)

Continuation of the table summarizing the five price-related reasons for cancelling the bid after bid opening (FAR 14.404-1(b) and (c)), how to avoid each situation and analyze it when it occurs.

FAR 14.404-1
(b) and (c)

	AVOIDING THE SITUATION	ANALYZING THE SITUATION WHEN IT OCCURS
UNACCEPTABLE PRICES FOR OTHERWISE ACCEPTABLE BIDS	In Chapter 2, you learned about maximizing competition. Efforts such as source development, proper selection of business terms, and appropriate publicizing of the purchase should maximize price competition. Adequate price competition should encourage bidders to submit fair and reasonable prices.	In Chapter 8, you learned about reasons for differences between different estimates of price reasonableness and between the estimates and actual prices. Both vendor differences and market differences must be carefully explored before you determine that a price is so unacceptably high as to justify cancellation.
BIDS NOT ARRIVED AT INDEPENDENTLY	Using the methods for maximizing competition that you learned in Chapter 2 should encourage independent bid development. Special care must be taken to avoid brand name purchase descriptions and specification requirements that require all bidders to use a key component or technology controlled by one of the competitors. Such requirements make independent bid development a practical impossibility. During the solicitation period, you must be alert to potential bidder comments concerning specifications that will restrict independent competition.	In Chapter 8, you learned about practices and events that indicate collusive practices and potential antitrust violations. You also learned about the importance of thorough review before making any allegation of collusive practices.

(Table continued on next page)

9.2.1 Price Related Reasons for Cancelling Bids (Continued)

Situations
Requiring
Cancellations
(Cont.)

Continuation of the table summarizing the five price-related reasons for cancelling the bid after bid opening (FAR 14.404-1(b) and (c)), how to avoid each situation and analyze it when it occurs.

POSSIBLE CANCELLATION SITUATION	AVOIDING THE SITUATION	ANALYZING THE SITUATION WHEN IT OCCURS
<p>MORE ECONOMICAL GOVERNMENT PERFORMANCE</p>	<p>You learned in Chapter 2 that the Government is always a potential competitor to perform required services. If you have reason to believe that the bid price will be higher than the cost of Government performance, request that Government personnel prepare a cost estimate under the provisions of FAR 7.304 and include the notice required by FAR 52.207-1, Notice of Cost Comparison (Sealed Bid), in the IFB. This action will put potential bidders on notice that the requirement may be performed in-house and encourage price competition.</p>	<p>If a cost estimate has been prepared under the requirements of FAR 7.304 and the appropriate notices included in the IFB, open the cost comparison form containing the Government performance cost estimate at the time of bid opening. After evaluation of bids and determination of low bidder responsibility, provide the low bid price to the organization that prepared the Government estimate for final cost comparison. Provide cost comparison results to the agency authority responsible for deciding between Government and contract performance. [FAR 7.306]</p> <p>If the cost estimate has not been prepared under the requirements of FAR 7.304 and the appropriate notices have not been included in the IFB, the solicitation cannot be formally compared with the cost of Government performance under FAR 7.306. However, the contract price must still be determined reasonable based on other bases of price analysis. If the price cannot be determined to be reasonable, you must consider cancellation of the solicitation based on unreasonable prices. At that time, you should schedule the requirement for a formal cost comparison under FAR Subpart 7.3, if you believe that Government performance would be more economical.</p>

9.2.1 Price Related Reasons for Cancelling Bids (Continued)

Decision to Cancel the Solicitation

In some circumstances, when you are determining if the solicitation should be canceled, you will need to consider the relative advantages and disadvantages to the Government. In other circumstances, the pricing concern is so great that you should cancel the solicitation whenever the situation is confirmed to exist.

POSSIBLE CANCELLATION SITUATION	RECOMMEND SOLICITATION CANCELLATION IF
IFB DID NOT CONSIDER ALL FACTORS OF COST	<p>One of the following statements about the IFB is true:</p> <ul style="list-style-type: none"> • It did not consider all price-related factors, or • It did not properly consider all price-related factors <p><i>AND</i> the lack of proper consideration will affect selection of the successful bidder,</p> <p><i>AND</i> the anticipated total cost to the Government for cancelling the solicitation and soliciting new bids with revised award criteria is less than the cost for proceeding with award under the current award criteria.</p>
GOVERNMENT NEEDS CAN BE SATISFIED WITH LESS EXPENSIVE PRODUCT	<p>An alternative product will satisfy the needs of the Government at a lower price,</p> <p><i>AND</i> the total cost to the Government for cancelling the solicitation and resolicitation is less than the cost for proceeding with award under the current award criteria.</p>
UNACCEPTABLE PRICES FOR OTHERWISE ACCEPTABLE BIDS	<p>The Government's requirement can be deferred,</p> <p>OR there is reason to believe that cancelling and resoliciting or negotiating would result in an acceptable price*</p>
BIDS NOT ARRIVED AT INDEPENDENTLY	<p>Available information demonstrates that the bids were not arrived at independently.</p>
MORE ECONOMICAL GOVERNMENT PERFORMANCE	<p>The cost estimate for Government performance was prepared prior to bid opening under the terms of FAR 7.304,</p> <p><i>AND</i> the appropriate notices were included in the solicitation, FAR 7.305,</p> <p><i>AND</i> cost comparison demonstrates sufficient savings, as defined in OMB Circular A-76, to warrant in-house Government performance,</p> <p><i>AND</i> the responsible agency official determines that performance by the Government is in the Government interest.</p>

* Because you expect demand to decline relative to supply, or you expect to reenter the market at a more favorable point in the cycle, or you have plans for source development, or you plan to resolicit under business terms and conditions which are more in keeping with market norms, etc.

9.2.1 Price Related Reasons for Cancelling Bids (Continued)

Document Your
Decision

Whenever you consider a solicitation cancellation, you should document your analysis and decision process. Documentation is essential to support the decision by the agency head, or delegated official, to cancel an IFB.

Documentation is also necessary when a determination is made not to cancel the solicitation. Buyers will later be able to use the information provided in acquisition planning to prevent similar situations and possible solicitation cancellations.

9.2.2 Negotiation After Cancellation

Introduction

Negotiation after IFB cancellation is authorized in two of the situations where the invitation may be canceled for pricing related reasons. To use negotiations to complete the sealed-bid acquisition, the agency head, or delegated official, must determine that the invitation is to be canceled and that the use of negotiations is appropriate to complete the acquisition.

Possible Cancellation Situations

The table below summarizes five possible cancellation situations and if completion of the acquisition through negotiation is authorized after IFB cancellation.

POSSIBLE CANCELLATION SITUATION	IS COMPLETION OF THE ACQUISITION THROUGH NEGOTIATION AUTHORIZED AFTER IFB CANCELLATION?
IFB Did Not Consider All Factors of Cost	No, acquisition completion through negotiation is not authorized. Proceed with a new acquisition.
Government Needs Can be Satisfied With Less Expensive Product	No, acquisition completion through negotiation is not authorized. Proceed with a new acquisition.
Unacceptable Prices for Otherwise Acceptable Bids	Yes, if authorized by the agency head, or delegated official, in the determination to cancel the IFB.
Bids Not Arrived at Independently	Yes, if authorized by the agency head, or delegated official, in the determination to cancel the IFB.
More Economical Government Performance	Not applicable.

(Continued on next page)

9.2.2 Negotiation After Cancellation (Continued)

Make Award
Without Issuing a
New Solicitation

FAR 15.103

When authorized, you may negotiate and make award without issuing a new solicitation, if the following conditions apply:

- Prior notice of intention to negotiate and a reasonable opportunity to negotiate must be given by the contracting officer to each responsible bidder who submitted a bid in response to the IFB.
 - The negotiated price must be the lowest offered by any responsible bidder.
 - The negotiated price must be lower than the lowest rejected bid submitted by a responsible bidder in response to the IFB.
-

Purchase Widgets (Cont.)

From this and earlier chapters, you know that you cannot assume that a price is reasonable simply because you have price competition. In this chapter, you learned about specific situations in which you must decide not to award to the responsive, responsible bidder with the lowest evaluated price.

For example, let's look at the answers to the two questions asked at the beginning of the chapter.

- *What should you have done if your estimated Should-Pay price per widget was \$1,500 and the low offer \$970?*

*If the low bid is unreasonably low, the contracting officer **CAN REJECT** the low bid.*

- *What should you have done if your estimated Should-Pay price per widget was \$650 and the low offer \$970?*

*If all bids are too high, the IFB **CAN BE CANCELLED** based on a written determination by the agency head or an authorized representative.*

CHAPTER 10

PRICE-RELATED DECISIONS IN NEGOTIATIONS

Learning Objectives

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective 10/1

Determine need for cost breakdowns.

Classroom Learning Objective 10/2

Determine need for discussions.

Classroom Learning Objective 10/3

Identify criteria for establishing the competitive range and determine whether to exclude an offer from the range based on price-related concerns.

Classroom Learning Objective 10/4

Identify price-related aspects of the proposal that are unclear and require a factfinding session to prepare for negotiations.

Classroom Learning Objective 10/5

Establish prenegotiation positions on price (lowest reasonable price, the highest reasonable price, and the target price) by applying selected techniques.

Classroom Learning Objective 10/6

Identify potential trade-offs between price and other terms and conditions.

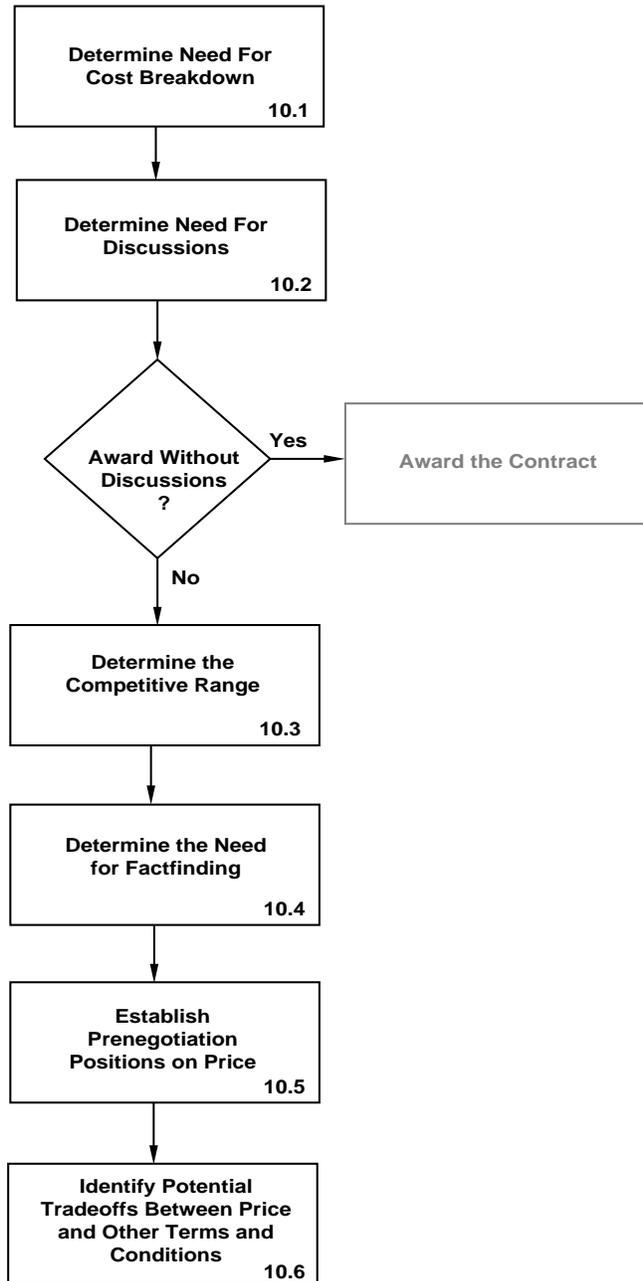
Classroom Learning Objective 10/7

Determine need to cancel and resolicit.

Procedural Steps

Procedural Steps

The following figure shows the sequence of events or steps that you should follow to make price-related decisions in negotiations.



Chapter Overview

Introduction

Contracting by negotiation requires a broader range of price-related decisions than in sealed bidding.

After receiving initial offers, you must:

1. Determine whether you have enough information to make an intelligent pricing decision.
2. Decide whether you are going to negotiate, and with whom.
3. Prepare for the negotiations by, among other things, establishing prenegotiation price objectives.
4. Determine what trade-offs you can use to obtain those objectives.
5. Determine whether to cancel and resolicit.

In this Chapter

In this chapter you will learn how to:

SECTION	DESCRIPTION	SEE PAGE
A	10.1 Determine the Need for Cost Data	10-7
	10.1.1 Cost Analysis in Support of Price Analysis	10-8
	10.1.2 Certified Cost or Pricing Data	10-10
B	10.2 Determine the Need for Discussions	10-13
	10.2.1 Determine Price Without Discussions	10-16
C	10.3 Determine the Competitive Range	10-19

(Overview continued on next page)

Chapter Overview

In This Chapter
(Cont.)

In this chapter you will learn how to:

SECTION	DESCRIPTION	SEE PAGE
D	10.4 Determine the Need for Fact-Finding	10-25
	10.4.1 Review Technical Requirements and Offeror Understanding	10-26
	10.4.2 Identify Areas of "Gold Plating" for Possible Elimination	10-28
E	10.5 Establish Pre-Negotiation Price Positions	10-31
	10.5.1 Analyze Risk	10-32
	10.5.2 Develop Negotiation Positions	10-33
F	10.6 Consider Potential Trade-Offs Between Price and Other Terms	10-37
G	10.7 Determine the Need to Cancel and Resolicit	10-39

Purchase Widgets (Cont.)

In sealed bidding, your price-related decisions are relatively limited. Most of the time, the price of the responsive, responsible bidder with the lowest evaluated bid is fair and reasonable. Your primary job in price analysis is to confirm price reasonableness.

In negotiations, you typically consider a larger range of price-related decisions on every procurement. For example, if you were going to negotiate your widget purchase, you would have to consider several price-related questions.

In this chapter, you will learn more about these decisions and points to consider in making them.

SECTION A

10.1 DETERMINE THE NEED FOR COST DATA

Overview

When Cost Data
Might Be
Necessary

FAR 15.804-6(a)

What if you have made such price comparisons as are feasible and still cannot verify the reasonableness of proposed prices?

Example 1 — Only one offer

Suppose you received only one offer priced under the dollar threshold for mandatory certified cost or pricing data. After comparing that price to historical data and commercial prices, you are not convinced that it is reasonable. In such situations, you can request a limited, partial, or complete cost breakdown from the offeror to support your negotiation of the price (see Chapter 3).

Example 2 — Inadequate Competition

Suppose, when contracting over the dollar threshold for mandatory certified data, you determine that (1) the price competition was not “adequate” and that (2) no other exemption applies (such as the exemption for prices “based on” recent adequate price competition). In such situations, require submission of certified cost or pricing data.

Example 3 — A Suspected Mistake

Suppose you suspect that the low offer is a “mistake”, because it is “far out of line” with other proposed prices or with the expected cost of the technical approach. In such situations, you may need to request data for a cost realism analysis, as described below.

Requesting
Submission of
Cost Data

Where necessary, contracting officers can request information on proposed costs prior to contract award. Bear in mind, however, that the offeror will need additional time to produce the data and that you will need additional time to analyze the data — which will probably delay award. Hence, requesting cost data should be a last resort when (a) you cannot justify exempting the offeror from the requirement for certified data or (b) price analysis alone is not sufficient to establish the reasonableness of proposed prices.

In this Section

This section covers the following topics:

TOPIC	SEE PAGE
10.1.1 Cost Realism Analysis	10-8
10.1.2 Data Submission	10-10

10.1.1 Cost Realism Analysis

Introduction

Even when “adequate price competition” justifies an exemption to the requirement for certified cost and pricing data, you can request data from an offeror for a **cost realism analysis** to ensure that there is a reasonable expectation that the proposed price is consistent with the required contract effort. This is akin to verifying that a bid is not based on a “mistake” (as described in the last chapter). As in sealed bidding, your goal is to obtain sufficient data on how the price was estimated to verify that the offeror can perform at that price.

Cost Realism Scenarios

The table below examines situations in which cost realism data might be necessary. Examples of the type of questions that cost data could help answer are also provided. Government technical and audit assistance may be required to analyze the cost data and answer related questions.

SITUATION	PURPOSE OF THE COST REALISM ANALYSIS	ANALYSIS QUESTIONS
New Contract Requirements	Determine if the offeror understands all contract requirements, including requirements that may have changed since the last purchase.	Has the offeror included adequate material, labor hours, and labor skills to complete all required tasks?
Complex Contract Requirements	Determine if the offeror understands all contract requirements, including the complex requirements included in the specifications or statement of work.	Has the offeror included adequate material, labor hours, and labor skills to complete all required tasks? Does the scheduling of labor indicate an understanding of the flow of the required labor effort?

(Table continued on next page)

10.1.1 Cost Realism Analysis (Continued)

Cost Realism Scenarios (Cont.)

Continuation of the table on potential situations in which cost realism analysis may be necessary.

SITUATION	PURPOSE OF THE COST REALISM ANALYSIS	ANALYSIS QUESTIONS
Greatest Value Competition	Determine if the offeror's price is consistent with the technical proposal. Performance specifications are used to provide greater opportunity for contractor technical innovation. However, their use can make pricing more difficult because offerors can use different technical approaches. Remember the styrofoam cup/ceramic mug example from Chapter 8? The fact that a styrofoam cup is a cheaper 8-ounce container does little to determine price reasonableness.	<p>Are material costs consistent with the type and amount of material described in the technical proposal?</p> <p>Are labor costs consistent with the level of labor effort (types of labor and hours) described in the technical proposal?</p> <p>Have all technical requirements been considered?</p>
Quality Concerns	Determine if the proposed price will permit the firm to meet contract quality and delivery requirements. Quality concerns can develop for even apparently simple contracts, such as janitorial services. Such contracts can easily be under-priced because offerors simply do not understand quality or delivery requirements. Concerns are normally greatest when firms have not contracted for the required product before and when past experience has indicated that contractors have proposed costs which have resulted in problems.	<p>Have all quality and service requirements been considered?</p> <p>Are material costs consistent with the requirements of the specifications or statement of work?</p> <p>Are labor costs, including project management and quality assurance labor, consistent with the level of labor effort required by the specifications or statement of work?</p>

10.1.2 Data Submission

Certified Data

In Chapter 3, you learned **when** you MUST REQUIRE cost data and a Certificate of Current Cost or Pricing Data for purchases over the dollar threshold for certified data.

You also learned about situations in which you MAY REQUIRE a Certificate of Current Cost or Pricing Data for purchases greater than \$25,000. However, in such situations, it is important to ensure that the benefits of obtaining the Certificate outweigh the cost involved. See Chapter 3 for more details about when the cost or pricing data must be certified as current, accurate, and complete.

If you expect to require the offeror to complete a Certificate of Current Cost or Pricing Data, ask for a cost proposal covering all elements of cost on Standard Form (SF) 1411.

Uncertified Data

When cost analysis is necessary for contract actions **under** the dollar threshold for mandatory certified data, request only those data necessary to determine whether the proposed price is reasonable. The contracting officer has discretion to determine whether to request limited, partial, or complete data (see Chapter 3 for more details). If requesting complete, albeit uncertified data, you may ask the offeror to submit the data in the SF 1411 format. Or you may devise a different format.

If requesting limited, partial, or cost realism data, specify exactly what you want from the offeror.

Purchase Widgets (Cont.)

If you were using negotiation procedures in your widget purchase, you would not need to request cost or pricing data. You have competitive prices, a valid price history, and a Government estimate to use as bases for your pricing decision.

SECTION B

10.2 DETERMINE THE NEED FOR DISCUSSIONS

Overview

In this Section

This section covers the following topics:

TOPIC	SEE PAGE
10.2 Determine the Need for Discussions	10-13
10.2.1 Determine Price Without Discussion	10-16

10.2 Determine the Need for Discussions

Introduction

As the contracting officer, you must determine the need for negotiations. **Do not conduct discussions with offerors when they are not necessary.**

If offerors know that award is likely to occur without negotiations, they will be encouraged to submit better offers initially. If they know that you will always negotiate, they may wait until your request for a "best and final offer" to submit a truly competitive price. Many offerors actually distrust the security of the competitive negotiation process and fear that their price will leak to competitors.

When Not to Conduct Discussions with Offerors

FAR 15.610(a)

You do **not** need to conduct discussions when one of the following situations exists:

- Prices are fixed by law or regulation.
 - The offer is for the set-aside portion of a partial set-aside.
 - **All** of the following are true:
 - You can clearly demonstrate, from full and open competition, or accurate prior cost experience with the product or service, that acceptance of the most favorable initial offer without discussion will result in the **lowest overall cost to the Government** at a fair and reasonable price.
 - The solicitation notified all offerors of the possibility that award might be made without discussion.
 - The award is in fact made without ANY written or oral discussions.*
-

(Continued on next page)

* However, you can communicate the offerors for the purpose of "clarification." Clarification is defined at FAR 15.601 as "communication with an offeror for the sole purpose of eliminating minor irregularities, informalities, or apparent clerical mistakes in the proposals. It is achieved by explanation or substantiation, either in response to a Government inquiry or as initiated by the offeror. Unlike discussion, clarification does not give the offeror an opportunity to revise or modify its proposal, except to the extent that correction of apparent clerical mistakes results in a revision." Also note that FAR 15.607(c) establishes a "mistake in proposal" procedure, much like the "mistake in bid" procedure, for resolving suspected mistakes in the low offer when award without discussion is contemplated.

10.2 Determine the Need for Discussions (Continued)

When to
Conduct
Negotiations
With Offerors

You must conduct discussions with offerors unless one of the situations permitting award without discussion exists.

Example

In the case of AMP, Inc. (B-239287), the Comp Gen decision found that *a contracting agency may not award a contract on the basis of initial proposals where prices received reasonably indicate that the Government could obtain savings by conducting discussions.* The Comp Gen found that when it appears that acceptance of an initial proposal will not result in the lowest overall cost to the Government, the agency is not free to award on an initial proposal basis, but instead must conduct discussions in an attempt to obtain the lowest overall cost or otherwise determine the proposal most advantageous to the Government. Stating the rule differently, you must conduct discussions when the circumstances of the competition, including the pattern of prices obtained, reasonably place the contracting officer on notice that award on the basis of initial proposals may not result in the lowest overall cost to the Government.

10.2.1 Determine Price Without Discussion

Introduction

To clearly demonstrate that a price is the lowest overall cost AND fair and reasonable, the contract terms and conditions must be clear to all offerors, and the offered price must be at or near the Government's estimate of a fair and reasonable price.

Consider Type and Extent of Risk

When ambiguities in terms and conditions exist, it is unlikely that the initial offers will result in the lowest overall cost to the Government. Ambiguities represent risk.

The offeror must consider the type and extent of risk when estimating cost and when determining the profit required to undertake a particular contract. You should always conduct discussions with offerors when you believe that significant uncertainties exist. Elimination of uncertainties will reduce risk and almost certainly result in a reduced contract price.

Compare Proposed Prices

FAR 15.610(a)

FAR 15.610(a) specifically identifies two appropriate bases to use in determining the most favorable initial offer. *Full and open competition and accurate prior cost experience* with the product or service will result in the lowest overall cost to the Government at a fair and reasonable price.

However, you should not limit yourself only to these two bases of price analysis, but consider all the price analysis bases used in developing your estimate of the price that the Government should pay.

Catalog, market, and regulated prices, in particular, should be considered. While the prices may not always result from free and open competition, they do represent what the general public is willing to pay in the conduct of normal business.

Purchase Widgets (Cont.)

If you were using negotiation procedures, you would have to consider three points to determine whether you should negotiate:

- 1. Can you demonstrate that the low offer will result in the lowest overall cost to the Government at a fair and reasonable price?*

Since your award criteria provided for the consideration of quality-related costs, those costs must be considered as you answer this question. If you can demonstrate that the low evaluated price is the lowest possible, given all evaluation factors, you need not negotiate. If you cannot, you must negotiate.

Because you have effective competition and a relevant price history, you may be able to award without negotiation. You could do so unless other information indicated that a lower price could be obtained through negotiation.

- 2. If you tentatively decide not to negotiate, you would have to assure that the solicitation notified all offerors of the possibility that you might award without competition. If the solicitation did not include such a notification, you must negotiate.*
- 3. If you decide not to negotiate and the solicitation contains the proper notifications, you must assure that no written or oral discussions take place. If discussions take place with any offeror, all offerors in the competitive range must be provided an equal opportunity.*

SECTION C

10.3 DETERMINE THE COMPETITIVE RANGE

Overview

Introduction

FAR 15.610(b)

Once the decision to negotiate has been made, you, as the contracting officer, must determine which firms will participate in discussions. Price is a primary factor in making this determination. FAR 15.610(b) requires that negotiations be conducted with all firms in the competitive range.

In this Section

This section covers the following:

- Definition
 - Determine the Competitive Range
 - Evaluate Proposed Price
-

10.3 Determine the Competitive Range

Definition

All proposals which have a reasonable chance of being selected for award must be included in the competitive range.

FAR 15.609(a)

FAR 15.609(a) requires that you determine the competitive range on the basis of cost or price and other factors stated in the solicitation.

Determine the Competitive Range

When you determine the competitive range, you should follow these steps:

Step 1: Evaluate All Proposals

Evaluate all proposals considering all award criteria (price and technical) established in the solicitation. *Remember, if you use competitive prices as a base for evaluation of price reasonableness, price must be a significant factor in proposal evaluation.*

Step 2: Evaluate Evaluation Scores Grouping

Evaluate the grouping, or arrangement, of evaluation scores for all proposals. This may be done by arranging the proposals from highest to lowest score and then looking for breaks in the scores such that natural groupings of similar scores may be identified.

FAR 15.609(a)

Step 3: Identify All Eligible Proposals

Identify all proposals which have a reasonable chance of being selected for award. If you have any doubt about whether the proposal is or is not in the competitive range, the proposal should be included.

FAR 15.609(c)

Step 4: Notify Unsuccessful Offerors

You must notify an unsuccessful offeror in writing as soon as practical after determining that the proposal is no longer eligible for award.

(Continued on next page)

10.3 Determine the Competitive Range (Continued)

Evaluate
Proposed Price

FAR 15.608(a)(1)

To perform Step 2 above, you will evaluate the proposed price estimate and determine if:

- The price is reasonable.
- The offeror understands the contract requirements.
- The offeror has the ability to perform the work.

You must consider the facts and apply your own judgment when making the final decision on which proposals should be included in the competitive range.

Consider the
Estimates of
Contract Price

In your evaluation, you should consider the estimates of contract price that you have developed during the solicitation process. Throughout this course, you have learned the importance of identifying different bases for price analysis and using them to estimate the price that the Government should pay for the product. For example, if all the bases indicate that the price should be \$35,000, you should be reasonably confident that the price will be very close to \$35,000.

Or, if one price analysis base tells you that the price should be \$32,000 and another tells you that it should be \$37,000, you should be reasonably confident that the price will be between \$32,000 and \$37,000. You should consider these kinds of information as you evaluate the grouping, or arrangement, of evaluation scores.

Evaluation
Practices to
Avoid

When determining the competitive range, you should **not**:

- Establish arbitrary limits based on the proposal with the most favorable evaluation.

Example 1

You should not arbitrarily determine that all proposals with prices within 20 percent of the most favorably evaluated proposal will be included in the competitive range and all others excluded.

(Continued on next page)

10.3 Determine the Competitive Range (Continued)

Evaluation
Practices to
Avoid (Cont.)

Example 2

You should not arbitrarily determine that price competition does not exist if none of the prices are within 20 percent of the proposal with the most favorable evaluation. This situation may require investigation to determine if one competitor has a lock on the competition. However, it does not call for an immediate decision that competition does not exist.

You should also not:

- Establish arbitrary limits based on the Government estimate or a preset evaluation score.
- Exclude any proposal from the competitive range unless you believe that it is so deficient, or out of line in price or technical merit, as to preclude further meaningful negotiations.
- Include any proposal in the competitive range when your evaluation tells you that the proposal definitely does not have a reasonable chance of being selected for award.

Example of
Proper Exclusion
from Competitive
Range

In the matter of Cadd Management Systems, Inc. the Comp Gen (B-239116) found that Cadd had been properly excluded from the competitive range. Cadd protested the exclusion from the competitive range of its proposal under an RFP issued by the Department of Interior for engineering and drafting services at the Grand Coulee Dam. Cadd's proposal was excluded from the competitive range because Cadd's proposed price was so much higher than the prices of other proposals that received similar technical scores. The Department of Interior did not consider Cadd to have a reasonable chance of receiving an award. Cadd contended that in determining its price it relied on information not revealed to other offerors as to the true scope of the work, and thus Cadd was the only offeror whose price accurately reflected the solicitation requirements. The Comp Gen found that the facts did not support the Cadd contention.

Purchase Widgets (Cont.)

If you decide to negotiate, you must negotiate with all firms in the competitive range. Following the steps defined in this section, you would probably decide to negotiate with all four of the firms that submitted widget offers. There is no clear basis to determine that any of the four does not have a reasonable chance of receiving a contract award. As a result, there is no clear basis for excluding any firm from the competitive range.

SECTION D

10.4 DETERMINE THE NEED FOR FACT-FINDING

Overview

Definition

Fact-finding is the search for facts to support development of your negotiation objectives. Some contracting personnel define the term broadly to include any search for pricing and product information from any source.

It is more common to limit the definition of fact-finding to mean the *search for offeror information not provided with the proposal*. In this text, you will use the more limited definition of the term.

Perform Fact-Finding

Fact-finding is not negotiations. In fact-finding you should:

- Ask questions.
- Offer information on Government requirements.
- Not present a Government position on proposal deficiencies or what the price should be.

FAR 15.609
FAR 15.610

Even though fact-finding is not negotiations, it is considered to be discussions under FAR 15.609 and 15.610. If you engage in fact-finding with one offeror, you are obligated to conduct discussions with all offerors in the competitive range.

In this Section

This section covers the following topics:

TOPIC	SEE PAGE
10.4.1 Price-Related Questions to Ask in Factfinding	10-26
10.4.2 Identify Areas of "Gold Plating" for Possible Elimination	10-28

10.4.1 Price-Related Factfinding

Introduction

The search for additional offeror information generally centers on a review of the technical requirements and the offeror's understanding of those requirements. These questions of course have an indirect but important bearing on the development of price negotiation objectives. If, for instance, you can identify areas of "gold-plating" for possible elimination, you should reflect the potential savings in your price negotiation objectives (see section 10.4.1).

However, you may also need to conduct factfinding to clarify aspects of the offeror's business proposal.

Levels and Methods of Fact-Finding

Fact-finding can be performed at different *levels of intensity*, and using different *methods of communication*. The fact-finding should be tailored to the particular contracting situation. You must use your own judgment in determining the proper method of fact-finding.

Written communications are more likely to be used in competitive situations than in noncompetitive situations. Written communications provide a record for impartial review that is very important when a source selection decision is made under competition, but it does not provide the free interchange that is very important in sole-source negotiations.

Determine Need for Fact-Finding

In determining the need for fact-finding and the method to use, you should consider:

- Need for discussions.
- Technical complexity of the requirement.
- Dollars involved.
- Amount and intensity of competition for the contract.

If discussions are not required, do not conduct fact-finding.

Price-Related Facts

Among other things, factfinding can be used to:

- Clarify apparent clerical mistakes in the proposal.
 - Obtain any missing information necessary to apply price-related factors (e.g., the specific point of origin if the terms are F.O.B. Origin).
 - Collect additional facts to clarify the proposed price or any conditions attached to the proposed price by the offeror.
-

(Continued on next page)

10.4.1 Price-Related Factfinding (Continued)

Methods of Fact-Finding

The following table identifies common methods of fact-finding and typical contracting situations for use of each method.

METHOD OF FACT-FINDING	TYPICAL CONTRACTING SITUATION
Telephone conversation to clarify limited points about the offeror's proposal.	Relatively simple requirement and low dollar value.
Face-to-face meeting in your office or conference room. The meeting might include only you and a single representative from the offeror, or it might include a variety of technical specialists on both sides.	Moderate requirement complexity and dollar value.
Face-to-face meeting at the offeror's facility or the job site. Such meetings typically include one or more technical specialists on both sides.	Relatively complex requirement and high dollar value.
Written request for proposal clarification or identification of a proposal deficiency.	Relatively complex competitive requirement where documentation is required.

10.4.2 Identify Areas of "Gold Plating" for Possible Elimination

Introduction

As you proceed through fact-finding, keep two questions in mind:

- Is this required by the contract?
 - Is this requirement really necessary?
-

Compare the Proposal with Contract Requirements

As you learned in Chapter 8, different offerors often have different understandings of the Government requirements. One firm may offer less than what is required. Another may offer more. An offer of less than what is required is unacceptable. An offer of more is "gold plating" by the offeror and will normally result in higher prices. You should reject "gold plating" when it increases contract price.

Occasionally, the offeror will say, "This is what the user really wants." Remember, the contract must define the needs of the Government. If the Government truly needs a premium product, the contract must specify the premium product. If it does not, the offeror should be advised that the product offered exceeds Government requirements.

Compare Contract Requirements with the Needs of the Government

You should always be on the lookout for "gold plating" in the Government's requirements. Apply the techniques that you learned in Chapter 2 for analyzing Government requirements and industry standards. If it appears that the contract requires more than what is needed by the Government, question the requirement. Be sure that you coordinate and clear any changes in contract requirements with the proper Government officials before you make them. All offerors still in the competitive range must be advised of any change in requirements.

Purchase Widgets (Cont.)

Any fact-finding for the widget purchase would probably be limited. You have several competitive offers and a good price history. Despite the large dollars involved, you would probably fact-find by telephone. If important issues are uncovered, the fact-finding might be elevated to a face-to-face meeting or even a plant visit.

SECTION E

10.5 ESTABLISH PRE-NEGOTIATION PRICE POSITIONS

Overview

Introduction

To negotiate effectively, you must establish price positions before negotiations begin. Many buyers fail in negotiations because they believe that there is only one price that is reasonable for a particular contract requirement. They believe that it is their job to force the offeror to accept that price.

In this Section

This section covers the following topics:

TOPIC	SEE PAGE
10.5.1 Analyze Risk	10-32
10.5.2 Develop Negotiation Positions	10-33

10.5.1 Analyze Risk

Introduction

Very seldom is there only one reasonable price for a product. For example, in Chapter 1 and throughout this text, you have learned that different price comparisons may lead you to different estimates of a reasonable price. The result is a range of prices that may be reasonable.

Estimate Should-Pay Prices

You must begin to estimate should-pay prices when you begin acquisition planning, and you should continue to refine your estimate as information is collected throughout the acquisition process. Use judgment in evaluating the reliability of each estimate when developing the total estimate of the price the Government should pay.

Different Judgments of Data Buyers and Sellers

It is likely that, given the same data, buyers and sellers will develop different judgments on which price is most reasonable. These judgments will be based on different perspectives and different assessments of the risk involved. Sellers are concerned about being able to complete contracts, cover costs, and make a profit. Buyers are concerned about contract completion, limited budgets, fairness to all offerors, and the public perception of their actions.

10.5.2 Develop Negotiation Positions

Introduction

There are two different types of negotiations:

- Noncompetitive (Sole-source)
- Competitive.

In personal business negotiations, it is common to follow the same general procedures in both types. We negotiate the best deal we can with one firm and then move to the next. Often, we tell the second firm the price offered by the first and ask if the firm can offer a better price.

In Government negotiations, the different types of negotiations must be approached differently.

Noncompetitive Negotiations vs. Competitive Discussions

In **noncompetitive** Government negotiations, you and the offeror exchange offers until a settlement is reached. The price agreement represents a position that both sides can accept.

In a **competitive** Government negotiation, you cannot make a counteroffer to the offeror. A counteroffer implies that, if it is accepted, you will have a contract agreement. Since you must consider all offerors in the competitive range, you cannot make such a commitment. In addition, you cannot provide any offeror with technical or price information from another offeror's proposal. Providing technical information is known as technical transfusion. Providing price information is known as auctioning. Both practices are forbidden by law and regulation.

FAR 15.610(e)

The differences in your approach to each type of negotiation require that you develop different negotiation positions for each.

Price Positions in Noncompetitive Negotiations

In a noncompetitive negotiation, develop three different price positions:

- Minimum
- Objective (or target)
- Maximum

Both parties to a negotiation expect movement by the other party. If you offer one price number throughout the negotiation, you can cause confusion and consternation on the part of the offeror. Different positions also provide you with an opportunity to collect information needed to understand the offeror's perspective on a reasonable price, and to sell the reasonableness of your negotiation positions.

(Continued on next page)

10.5.2 Develop Negotiation Positions (Continued)

Price Positions in
Noncompetitive
Negotiations
(Cont.)

Your negotiation positions on price should be based on price estimates developed during the acquisition process.

- **The minimum price position** should be your starting place in negotiations and your first offer. Never offer a price that cannot be supported by reasoned analysis.
- **The objective, or target, price position** should be the price that you think is most reasonable, based on your analysis of the reliability of different price estimates. It should be the price that you think the Government should pay.
- **The maximum price position** should be the highest price that you can reasonably accept, given the information you have at the beginning of the negotiation. The maximum price may change during negotiations if additional information is presented by the offeror that changes the situation.

Price Positions in
Competitive
Discussions

Before entering into competitive discussions, develop separate prenegotiation positions for each proposal. How you persuade an offeror to improve its proposal (where improvement is necessary) is different than in noncompetitive negotiations.

FAR 15.610(c)

In competitive discussions, you must:

- Advise the offeror of deficiencies in its proposal so that the offeror is given an opportunity to satisfy the Government's requirements. This includes your reasons (if any) for believing that the offeror's pricing is deficient based on comparisons with historical prices, commercial prices, yardsticks, and Government estimates.
- Attempt to resolve any uncertainties concerning the technical proposal and other terms and conditions of the proposal.
- Resolve any suspected mistakes by calling them to the offeror's attention as specifically as possible without disclosing information concerning other offeror's proposals or the evaluation process. This is especially important when the proposed price is below your minimum position.
- Provide the offeror a reasonable opportunity to submit any cost or price, technical, or other revisions to its proposal that may result from the discussions.

In competitive discussions, you also can:

- Point to other indicators that the proposed price is too high (e.g., the producer price index).
-

10.5.2 Develop Negotiation Positions (Continued)

Price Positions in
Competitive
Discussions
(Cont.)

FAR 15.610
(d)-(e)

In competitive discussions, you also can: (cont.)

- Point out any proposal variation from the RFP's business terms or conditions that you believe is unnecessary and has affected the proposed price.
- Discuss (i.e., ask "what if" questions about) potential tradeoffs between price and other contract terms (see section 10.6).

In competitive discussions, you cannot:

- Use auction techniques, such as—
 - Indicating to an offeror a cost or price that it must meet to obtain further consideration,
 - Advising an offeror of its price standing relative to another offeror (however, it is permissible to inform an offeror that its price is considered by the Government to be too high or unrealistic), and
 - Otherwise furnishing information about other offeror's prices.
- Engage in technical leveling—helping an offeror to bring its proposal up to the level of other proposals through successive rounds of discussion, by pointing out weaknesses resulting from an offeror's lack of diligence, competence, or inventiveness in preparing the proposal.
- Engage in technical transfusion — disclosing technical information provided by one offeror to another offeror, resulting in improvements to the second offeror's proposal.
- Otherwise tell one competitor about the offers of other competitors. Such action could give favored firms an unfair advantage and is forbidden by law and regulation.

It is up to the offeror to determine how the offer should be modified. All offerors must be provided an opportunity to submit a "best and final offer" (BAFO) that includes changes to their proposal that resulted from the negotiations. Note that, if none submit a BAFO below your "maximum price position", you might have to consider cancelling the RFP (see section 10.7).

Purchase Widgets (Cont.)

After fact-finding and prior to negotiation, you would establish your pre-negotiation positions, including a position on price. You would use all the information collected throughout the acquisition process to develop your positions.

SECTION F

10.6 CONSIDER POTENTIAL TRADE-OFFS BETWEEN PRICE AND OTHER TERMS

Introduction

The price positions described in the last section should be based on the requirements stated in the original solicitation, unless the requirements changed after proposals were received. If requirements have changed, all offerors must be notified of the change.

Requirement Changes

In noncompetitive negotiations, all elements of the contract are subject to negotiated change during the negotiation process. In preparing for such negotiations, you should identify any changes in terms and conditions that you are willing to trade for certain related changes in price. The potential requirements changes could be either additions or deletions. The potential price changes should correspond with the value to the Government of the change in technical requirements. A technical requirements increase should result in a higher price objective, while technical requirements decrease should result in a lower price objective. A change in requirements that is neither an increase or decrease in overall technical requirements should result in no change to the price objective.

FAR 15.610(d)

In competitive negotiations, no requirements changes can be made unless all offerors have an opportunity to offer a proposal on any change. Remember that technical leveling is prohibited by FAR 15.610(d).

You must obtain approval from appropriate Government technical personnel before suggesting or agreeing to any change in technical requirements. As you and the appropriate Government technical personnel agree on requirements changes that you would be willing to consider, develop an estimate of the related objective price change.

(Continued on next page)

10.6 Consider Potential Trade-Offs Between Price and Other Terms

Format for Analyzing Potential Tradeoffs

The following chart provides a format for analyzing potential tradeoffs during negotiations. A data page containing the type of information described below will greatly speed negotiations and enable you to concentrate on the important issues involved.

TYPE OF CHANGE IN REQUIREMENTS	RELATED OBJECTIVE INCREASE	RELATED OBJECTIVE DECREASE
Technical Requirements		
Inspection and Acceptance Terms		
Delivery or Performance Terms		
Contract Type		
Socioeconomic Terms		
Payment Terms		
Government Furnished Property		
Warranties		
Patents and Rights in Data		
Other Terms and Conditions		

SECTION G

10.7 DETERMINE THE NEED TO CANCEL AND RESOLICIT

Introduction

FAR 15.608(b)

FAR 15.608(b) states that all proposals received in response to a solicitation may be rejected if the agency head determines in writing that:

1. All otherwise acceptable proposals received are at unreasonable price.
2. The proposals were not independently arrived at in open competition, were collusive, or were submitted in bad faith.
3. A cost comparison as prescribed in OMB Circular A-76 and FAR 7.3 shows that performance by the Government is more economical.
4. For other reasons, cancellation is clearly in the Government's interest.
5. A violation or possible violation of Section 27 of the Office of Federal Procurement Policy Act, as amended, has occurred.

FAR 7.3

FAR 14.404-1(c)

Of the five reasons for rejecting all responses in a negotiated contract action, the first three duplicate reasons for rejection of bids presented in FAR 14.404-1(c) and examined in Chapter 9 of this text. The fifth reason is related to violation of the procurement integrity requirements set forth in the law and implemented by FAR 3.104.

FAR 3.104

The fourth reason is unique to negotiation and is examined more closely in the following paragraphs.

Define the Government's Interest

The phrase "clearly in the Government's interest" is a broad statement. In general, you should recommend that the Government cancel a solicitation and resolicit in situations where you can answer yes to either of the following questions:

- Will cancelling the solicitation and resoliciting potentially increase competition?
 - Will cancelling the solicitation and resoliciting potentially produce cost savings to the Government?
-

(Continued on next page)

10.7 Determine the Need to Cancel and Resolicit (Continued)

Cancellation and
Resolicitation
Example

FAR
15.608(b)(4)

The Comptroller General (Comp Gen) decision in the matter of G.K.S., Inc. (B235208) provides an example of rejecting all proposals in the Government's interest and resoliciting. In that case, the protestor, G.K.S., argued that the Air Force should not have cancelled a solicitation because the new solicitation was not substantially different from the original. G.K.S. argued that an agency cannot cancel an RFP solely for the purpose of allowing another party to have an opportunity to participate in a resolicitation with identical requirements. Further, G.K.S. alleged that there was a fair and reasonable price available under the original RFP since its proposed price was less than prices paid by the Government in the previous 3 years and was 30 percent less than the Government's estimated unit price. G.K.S. also claimed that there was competition under the original RFP because three sources of supply were identified in the RFP and two of the identified sources submitted offers.

The Comp Gen found that, under FAR 15.608(b)(4), the procuring agency may reject all proposals where cancellation of the solicitation is clearly in the Government's best interest. Pursuant to this regulation, a procuring agency may cancel a negotiated procurement based on the potential for increased competition or cost savings. Thus, once the Air Force learned of the possibility of increased competition and cost savings because of a newly approved source, it could properly cancel the RFP and resolicit for the requirement. While the Air Force may not have been required to cancel, the Comp Gen found that the Air Force did act reasonably under the circumstances in cancelling the RFP.

Purchase Widgets (Cont.)

Are there any trade-offs that would improve the overall benefit to the Government?

For example:

- *Can you obtain a significant price reduction for a change in requirements that will not affect Government use of the widget?*
- *Can you obtain a significantly better product at no increase in price, or only a slight increase in price?*

Consider Potential Trade-Offs Between Price and Other Terms

CHAPTER 11

DOCUMENTATION

Learning Objectives

At the End of
This Chapter

At the end of this chapter you will be able to:

Classroom Learning Objective 11/1

Identify the price-related sections of the contract file and what must be documented in those sections of the file.

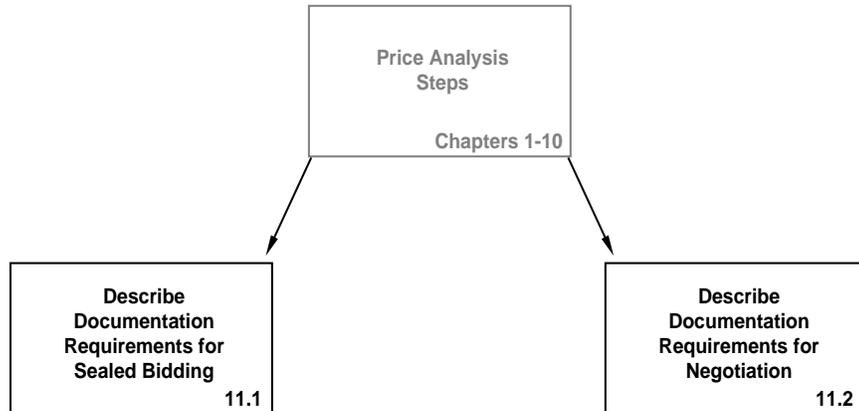
Classroom Learning Objective 11/2

Identify principle elements of a price negotiation memorandum (PNM).

Procedural Steps

Procedural Steps

The following figure shows the sequence of events or steps that you should follow to learn about the pricing documentation required in sealed bidding and in negotiations where the pricing decision is based exclusively or primarily on price analysis.



Chapter Overview

Introduction

Good documentation is essential to good contracting. As time goes on, you forget times, dates, persons involved, and other elements that are important in all aspects of contracting and pricing in particular.

While fresh in your mind, you should document:

- Events
 - Actions
 - Decisions
-

Lack of Documentation

Lack of good documentation can create serious problems. Since you will not always be available to explain what you did, or why, other contracting personnel will not know what happened, or about any special circumstances that may have occurred. Possible situations that can result from lack of documentation are:

- Other contracting personnel may take the time to accomplish an action or make a decision that you have already completed. These actions or decisions may conflict with yours.
 - Legal advisors and management review teams may question your action or lack of action because they do not have all of the relevant information.
 - If disputes arise, you will find that lack of documentation is generally treated as a lack of action. If it is not documented, it never happened.
-

Chapter Overview

In This Chapter

In this chapter, you will learn about the pricing documentation required in sealed bidding and in negotiations where the pricing decision is based exclusively or primarily on price analysis.

SECTION	DESCRIPTION	SEE PAGE
A	11.1 Document Pricing Actions in Sealed Bidding	11-7
	11.1.1 Record All Bids	11-8
	11.1.2 Record the Reason for Rejection of Bids	11-14
	11.1.3 Record How Any Ties Were Broken	11-17
	11.1.4 Identify the Basis for Considering the Award Price Reasonable	11-18
B	11.2 Document Pricing Actions in Negotiations	11-19

Purchase Widgets (Cont.)

As you prepare to award your widget contract, you must document the pricing actions that you have taken and the decisions that you have made. As you read this chapter, you will see that negotiated contract actions typically require more documentation than those completed using sealed bidding. There are two obvious reasons:

- 1. Typically, negotiations involve more complex requirements and more unknowns than you can accept in sealed bidding.*
- 2. Negotiated contract actions typically require more decisions than sealed bidding, and each decision requires documentation.*

Read the following chapter and relate what you read to the widget purchase. Think about how you would tell the widget story. Remember, you must assume that the readers know nothing, except what you tell them, about widgets or the contract action.

SECTION A

11.1 DOCUMENT PRICING ACTIONS IN SEALED BIDDING

Overview

In This Section

In this section you will learn how to:

TOPIC	SEE PAGE
11.1.1 Record All Bids	11-8
11.1.2 Record the Reason for Rejection of Bids	11-14
11.1.3 Record How Any Ties Were Broken	11-17
11.1.4 Identify the Basis for Considering the Award Price Reasonable	11-18

11.1.1 Record All Bids

Introduction

As soon as practicable after opening, the bid opening officer must assure that all bids are accurately recorded and certified.

Forms to Be Completed

Except for the Defense Fuel Supply Center, in the acquisition of natural gas, petroleum or coal, and the Defense Personnel Support Center, in the acquisition of perishable subsistence items, one of the following forms must be completed:

- Standard Form (SF) 1409, Abstract of Offers.
- Optional Form (OF) 1419, Abstract of Offers—Construction.
- An automated equivalent to one of the above forms.

Blank copies of the SF 1409 and the OF 1419 are shown on the following pages. Each of the forms identifies the information required for completion. Agencies and contracting offices may establish additional documentation requirements.

Situations With Numerous Bid Items

In situations where bid items are too numerous to warrant complete recording of all bids, you may limit abstract entries for individual bids to the item numbers and bid prices. In preparing these forms, use the extra columns of the SF 1409 or OP 1419 to record the information that the contracting office deems necessary. If needed, the following forms can be used:

- SF 1410, Abstract of Offers—Continuation, with the SF 1409.
- OF 1419A, Abstract of Offers—Construction, Continuation Sheet, with the OF 1419.

Blank copies of these forms appear on the following pages.

(Continued on next page)

11.1.1 Record All Bids (Continued)

Make Abstracts
Available for
Public Inspection

FAR Subpart
24.2, Freedom of
Information Act

FAR 14.403(d)

You must make abstracts of offers for unclassified acquisitions available for public inspection. Publicly displayed abstracts must not contain:

- Information on any failure to meet minimum standards or responsibility.
- Information on apparent collusion of bidders.
- Other notations properly exempt from disclosure to the public in accordance with agency regulations implementing FAR Subpart 24.2, Freedom of Information Act.

A cancellation of the Invitation for Bids (IFB) before the time set for bid opening must be recorded together with the number of bids invited and the number of bids received.

11.1.2 Record the Reason for Rejection of Bids

Introduction

In Chapter 9, you learned that an individual bid may be rejected or an entire solicitation cancelled for pricing related reasons. Whenever a bid is rejected, it is essential that the facts leading to the decision, as well as the decision itself, are clearly documented.

Rejection of “Bids Out of Line”

Any bid may be rejected if you, as the contracting officer, determine in writing that the price is unreasonable. Unreasonableness of price includes the total price of the bid, as well as the prices of individual items.

Typically, the rejection of an individual bid because of unreasonable pricing begins with an alleged or suspected mistake in bid. Whenever you suspect a mistake in bid:

FAR 14.406

- You must request the bidder to verify the bid, following the requirements of FAR 14.406.
- The bidder is expected to respond to the request for verification.

**FAR 14.406-
3(g)(5)**

If the bidder fails or refuses to furnish evidence to support the mistake in bid, consider the bid as submitted, unless you determine under FAR 14.406-3(g)(5) that one of the following situations exists:

- The amount of the bid is so far out of line with the amounts of other bids received, or with the amount estimated by the agency, or determined by the contracting officer as reasonable, as to reasonably justify the conclusion that acceptance of the bid would be unfair to the bidder or to other bona fide bidders.
- There are indications of error so clear as to reasonably justify the conclusion that acceptance of the bid would be unfair to the bidder or to other bona fide bidders.

Documentation

Documentation **MUST** include a record of all attempts made to obtain the information required and the action taken with respect to the bid.

**FAR 14.406-
3(g)(5)**

Documentation **SHOULD** also include:

- Data supporting the “agency estimate” or the contracting officer's determination of the “reasonable amount”, when the reason for rejecting the bid is that the bid is “so far out of line” with either of those amounts.
 - A clear determination that one or both of the FAR 14.406-3(g)(5) situations exist.
-

(Continued on next page)

11.1.2 Record the Reason for Rejection of Bids (Continued)

Rejection of Unreasonable Bids

What if the bidder verifies the bid? You may still determine, based on your analysis of the submitted evidence, that the bid is not reasonable. In documenting your findings, consider the following Comptroller General case (B-237968, Matter of: Pamfilis Painting, Inc., April 3, 1990):

“A contracting officer's decision to reject an apparently mistaken bid under the authority of the Federal Acquisition Regulation s 14.406-3(g)(5) is subject to question only where it is shown to be unreasonable. ... Moreover, an obviously erroneous bid may not be accepted even if it is verified by the bidder. Id.

“The contracting officer's decision to reject Pamfilis's bid was reasonable. The record demonstrates that there is a significant disparity in Pamfilis's bid and the government estimate for many elements of work which creates reasonable doubt that the protester understood the scope of work required by the IFB. ... the record indicates that the Navy questioned whether Pamfilis's bid included the costs associated with (1) the specialty painting required in the solicitation, i.e., railing and trim painting, metal and fence painting; (2) demolition, (3) quality assurance, and (4) utilities, water, scaffolding and tools. While Pamfilis denies any mistake in its bid and continues to maintain that its total bid price is reasonable and includes all costs reasonably associated with all items of work to be performed, the protester has not furnished any probative evidence to support its bid calculations. As noted above, Pamfilis was repeatedly asked to furnish its original work papers which Pamfilis has failed to provide. In view thereof, and in view of the disparities between Pamfilis's bid and the government estimate, the contracting officer reasonably rejected Pamfilis's bid as mistaken.”
(emphasis added)

Rejection of Unbalanced Bids

Any bid may be rejected if the prices for any line items or subline items are materially unbalanced. REMEMBER from Chapter 9 that a bid is materially unbalanced if it is mathematically unbalanced and one of the following is true:

- There is reasonable doubt that the lowest evaluated bid will actually result in the lowest cost to the Government.
- The offer is so grossly unbalanced that its acceptance would appear to allow advanced payments.

(Continued on next page)

11.1.2 Record the Reason for Rejection of Bids (Continued)

Rejection of
Unbalanced Bids
(Cont.)

Documentation SHOULD include:

- Data on the price analysis that indicated a materially unbalanced price.
 - A clear determination that the bid is unbalanced, citing one or both of the reasons identified above.
-

Cancellation for
Pricing Related
Reasons

In Chapter 9, you learned that five of eleven reasons for canceling an IFB after bid opening are pricing related. The relevant subparagraphs of FAR 14.404-1(c) are:

FAR 14.404-1(c)

- (4) The invitation did not provide for consideration of all factors of cost to the Government, such as cost of transporting Government-furnished property to bidders' plants.
- (5) Bids received indicate that the needs of the Government can be satisfied by a less expensive article differing from that for which the bids were invited.
- (6) All otherwise acceptable bids received are unreasonable prices, or only one bid was received and the contracting officer cannot determine the reasonableness of the bid price.
- (7) The bids were not independently arrived at in open competition, were collusive, or were submitted in bad faith.
- (9) A cost comparison as prescribed in OMB Circular A-76 and Subpart 7.3 shows that performance by the Government is more economical.

The agency head, or designee, **MUST** determine in writing that the situation exists, present a compelling reason for canceling the solicitation, and reject all bids before the IFB can be canceled.

The determination **SHOULD** identify:

- All the findings that led to the decision — including, in the case of 14.404-1(c)(6) — data supporting the contracting officer's conclusion that all bids received are unreasonable (e.g., in comparison to commercial prices, historical prices, the Government estimate, et. al.).
 - The specific reason for the cancellation, including the authorizing FAR reference.
-

11.1.3 Record How Any Ties Were Broken

Introduction

FAR 14.407-6

When two or more bids are equal in ALL respects, contract must be awarded in the following order of priority:

- 1) Small business concerns that are also labor surplus area concerns.
- 2) Other small business concerns.
- 3) Other business concerns that are also labor surplus area concerns.
- 4) Other business concerns.
- 5) If two or more bidders remain tied, the tie must be broken by a drawing by lot limited to the tied bidders. If time permits, the bidders involved must be given the opportunity to attend the drawing. The drawing must be witnessed by at least three persons.

Documentation

You **MUST** include in the documentation:

- A written agreement that the contractor will perform, or cause to be performed, the contract in accordance with the circumstances justifying the priority used to break the tie or select bids for a drawing by lot.
 - A record of how the tie was broken. The record should consider the order of priority of tie breaking criteria and the offerors eliminated by each criterion.
 - If applicable, the names and addresses of at least three individuals who witnessed the drawing by lot and the person who supervised the drawing.
-

11.1.4 Identify the Basis for Considering the Award Price Reasonable

Introduction

FAR 14.407-2

You must determine that the prices offered are reasonable before making a contract award. In each case, the determination must consider all relevant circumstances. Particular care must be taken in cases where only a single bid is received.

Document in the Contract File

FAR 14.407-7

Under the requirements of FAR 14.407-7, you **MUST** document in the contract file:

FAR 14.103-2
FAR 14.103-2(d)

- Compliance with FAR 14.103-2, including FAR 14.103-2(d), which requires that award be made to the responsible bidder whose bid is responsive to the terms of the IFB and is most advantageous to the Government, considering only price and price-related factors included in the IFB.
- That the accepted bid was the lowest bid received, or list all lower bids with reasons for their rejection in sufficient detail to justify the award. If bids are rejected for price-related reasons, include details, or reference to details, of the price analysis supporting the rejection decision.

By awarding the contract, you, as the contracting officer, demonstrate an affirmative decision that the price is reasonable.

SECTION B

11.2 DOCUMENT PRICING ACTIONS IN NEGOTIATIONS

In This Section

Requirements for documentation of negotiations vary with the dollars involved. In this section you will learn about documentation of both small purchases and contracts.

Purchases Not Over Ten Percent of Small Purchase Limitation

FAR
13.106(a)(4)

The administrative cost of verifying the reasonableness of the price of purchases not exceeding 10 percent of the small purchase limitation may more than offset potential savings from detecting overpricing. Remember from Chapter 6 that analysis is only required when you:

- Suspect or have information to indicate that the price may not be reasonable (such as, comparison with previous prices or personal knowledge).
- Purchase an item for which no comparable pricing information is readily available.

Since there is no requirement for analysis, there is no requirement for documentation unless one of the two situations described exists. When one of these situations does exist, documentation must be sufficient to establish price reasonableness. Award demonstrates an affirmative decision that the price is reasonable.

Other Small Purchases

FAR 13.106(c)

Other small purchases REQUIRE a determination that the price is reasonable:

- When possible, the determination will be based on price competition.
 - When adequate price competition does not exist, you should make your decision using one of the following bases for price analysis:
 - Past prices that have been determined to be fair and reasonable
 - Current price lists
 - Catalogs
 - Advertisements
 - Similar items in a related industry
 - Value analysis
 - Personal knowledge
 - Any other reasonable basis
-

(Continued on next page)

11.2 Document Pricing Actions in Negotiations

Other Small
Purchases
(Cont.)

FAR 13.106(c)

You MUST include in the documentation:

- All quotes
 - If an oral solicitation is used, include an informal record of oral price quotations.
 - If a written solicitation is used, include an abstract or notes to show prices, delivery, references to printed price lists used, the vendor or vendors contacted, and other pertinent data.
- A statement detailing any price analysis other than adequate price competition used to determine price reasonableness.
- If only one source was solicited, a notation to explain the absence of competition, unless the contract is for utility services available from only one source or educational services from nonprofit institutions.

Price
Negotiations
Under FAR Part
15

FAR 15.807(b)

Contracting officers must “establish prenegotiation objectives before the negotiation of any pricing action. The scope and depth of the analysis supporting the objectives should be directly related to the dollar value, importance, and complexity of the pricing action.”

In some contracting activities, contracting officers prepare written prenegotiation memoranda to document these prenegotiation objectives. Whether you work for such an activity or not, you should draft the following elements of the Price Negotiation Memorandum (PNM) **before** discussions:

- Description of the acquisition, including appropriate identifying numbers (e.g., RFP number).
- If cost or pricing data were not required to support any price negotiation over the dollar threshold for mandatory certified cost or pricing data, the exemption or waiver used and the basis for claiming or granting it.
- If Certified Cost or Pricing Data were required for any price negotiation under the dollar threshold for mandatory certified cost or pricing data, the rationale for such requirement.
- A summary of the contractor's proposal, field pricing, and internal analyses. The reasons for any pertinent variances should be carefully summarized.
- The most significant facts or considerations controlling the establishment of the prenegotiation price objective.

(Continued on next page)

11.2 Document Pricing Actions in Negotiations (Continued)

Price
Negotiations
Under FAR Part
15 (Cont.)

At the close of each negotiation, contracting officers must promptly prepare a memorandum of the principle elements of the price negotiation. The memorandum is commonly referred to as the price negotiation memorandum (PNM).

FAR 15.808

FAR 15.808 REQUIRES that you include a PNM in each negotiated contract file. The PNM MUST contain the following information:*

- Purpose of the negotiation (new contract, final pricing, etc.).
 - Description of the acquisition, including appropriate identifying numbers (e.g., RFP number).
 - The name, position, and organization of each person representing the contractor and the Government in negotiations.
 - If cost or pricing data were not required to support any price negotiation over \$100,000 (\$500,000 for DOD), the exemption or waiver used and the basis for claiming or granting it.
 - If Certified Cost or Pricing Data were required for any price negotiation under \$100,000 (\$500,000 for DOD), the rationale for such requirement.
 - A summary of the contractor's proposal, field pricing, and internal analyses. The reasons for any pertinent variances should be carefully summarized.
 - The most significant facts or considerations controlling the establishment of the prenegotiation price objective and the negotiated price, including an explanation of any significant differences between the two positions. To the extent that direction is received, the PNM must discuss and quantify the effect of the direction given by groups or individuals not normally exercising authority during the award and review process, if such direction has significant impact.
-

(Continued on next page)

* NOTE: Additional information is required if price reasonableness was in part established through the use of cost analysis.

11.2 Document Pricing Actions in Negotiations (Continued)

Document
Procurement
Situation

In preparing your prenegotiation records and the PNM, you **SHOULD** also document any important aspects of the procurement situation that could reasonably affect your pricing decision:

- Describe the items or services being purchased.
- Indicate the quantities being purchased.
- Identify the unit prices proposed and negotiated.
- Identify the place of contract performance.
- Describe the delivery schedule or period of performance.
- State whether there is a difference between the proposed delivery schedule, the objective schedule, and the final negotiated schedule.
- State whether there have been any previous buys of similar products; if so, identify:
 - When
 - How many
 - Schedule/production rate
 - Contract type
 - Unit prices or total prices, including both target and final prices, if applicable
- Identify whether Government-furnished material will be provided as a result of the contract, and if so, its estimated dollar value.
- Describe any unique aspects of the procurement action.
- Describe any outside influences or time pressures associated with the procurement, for example, procurement priority and funding limitations, etc.

In the final paragraphs of the PNM, you **SHOULD** include a determination that the negotiated price is considered fair and reasonable. If the price is not reasonable, state this fact in the PNM, along with the reasons for acceptance of an unreasonable price.

Purchase Widgets (Cont.)

*As you complete the required documentation, you complete the pricing action. There is no magic involved but **good analysis and good documentation** are essential. **REMEMBER**, you do not want to be the next buyer accused of buying a \$435 hammer!*

APPENDIX A

GLOSSARY

ACQUISITION	The acquiring by contract, with appropriated funds, of supplies or services (including construction) by and for the use of the Federal Government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated. Acquisition begins at the point when agency needs are established and includes the description of requirements to satisfy agency needs, solicitation and selection of sources, award of contracts, contract financing, contract performance, contract administration, and those technical and management functions directly related to the process of fulfilling agency needs by contract. ¹
ACQUISITION PLAN	A plan for an acquisition which serves as the basis for initiating the individual contracting actions necessary to acquire a system or support a program. ²
ACQUISITION PLANNING	The process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost; includes development of an overall strategy for managing the acquisition. ³
ADEQUATE PRICE COMPETITION	<p>A condition that serves as an exemption from the requirement for submission of cost or pricing data and a basis for price analysis. This condition exists when two or more responsible offerors, competing independently, have submitted responsive proposals for a contract to be awarded to the responsible offeror with the lowest evaluated price. However, price competition is not adequate if <u>any</u> of the following is true.</p> <ul style="list-style-type: none">• The solicitation was made under conditions that unreasonably denied one or more known and qualified offerors an opportunity to compete.• The low offeror has such a decided advantage that it is practically immune from competition.• Other price comparisons (or a cost realism analysis) show that the low offer is unreasonable.⁴

¹See FAR 2.1.

²See FAR 7.104 and 7.105.

³See FAR 7.101.

⁴See FAR 15.804(b).

GLOSSARY

ADVANCE PAYMENTS	Advances of money by the Government to a contractor before, in anticipation of, and for the purpose of complete performance under one or more contracts. They are expected to be liquidated from payments due to the contractor incident to performance of the contracts. Since they are not measured by performance, they differ from partial, progress, or other payments based on the performance or partial performance of a contract. ⁵
AGENCY	One party, known as the principal, appoints another party, known as an agent, to enter into a business or contractual relationship with a third party. In Governmental contracting, the: <ul style="list-style-type: none">• Government is the principal.• Contracting officer (CO) is the agent.• Third party is the contractor.
ALLOCABLE COST	A cost is allocable if it assignable or chargeable to one or more cost objectives in accordance with the relative benefits received or other equitable relationships defined or agreed to between contractual parties. ⁶
ALLOWABLE COST	A determination that a cost can be properly charged to a contract. A cost is considered allowable if it is: <ul style="list-style-type: none">• Reasonable,• Properly allocated to the contract,• Properly accounted for, as prescribed in generally accepted accounting principles or, if applicable, Cost Accounting Standards, <u>and</u>• NOT otherwise ruled out by FAR Part 31 or by any language in the contract.⁷
AMENDMENT	A change (correction, deletion, or addition) to any information contained in an IFB or RFP (or previous amendment thereto). The amendment becomes part of the solicitation and any resulting contract. ⁸
APPROPRIATION	Authority to obligate public funds that will result in immediate or future outlays.

⁵See FAR 32.102(a).

⁶See FAR 31.201-4.

⁷See FAR 31.201-2.

⁸See FAR 14.208 and 15.410.

AUCTION	<p>A negotiation tactic prohibited under FAR 15.610. Prohibited auction techniques include:</p> <ul style="list-style-type: none"> • Indicating to an offeror a cost or price that it must meet to obtain further consideration. • Advising an offeror of its price standing relative to another offeror (however, it is permissible to inform an offeror that its cost or price is considered by the Government to be too high or unrealistic). • Otherwise furnishing information on other offerors' prices.⁹
AUDIT	<p>A review of a company's accounting procedures, accounting practices, books, records, documents, and other evidence related to (a) cost or pricing data or (b) costs claimed to have been incurred or anticipated to be incurred in performing a contract.¹⁰</p>
AUDITOR	<p>A professional accountant acting as a principal advisor to contracting officers on contractor accounting and contract audit matters.</p>
"BASED ON" ADEQUATE COMPETITION	<p>Condition that serves as an exemption from the requirement for submission of cost or pricing data. This condition exists when current competition does not exist but a comparison of the offered price with current or recent prices paid is sufficient to establish price reasonableness. Prices for comparison must be used for the same or similar items bought in comparable quantities under contract awarded after adequate competition.¹¹</p>
"BASED ON" CATALOG OR MARKET PRICE	<p>Condition that serves as an exemption from the requirement for submission of cost or pricing data. A price may be considered to be <i>based on</i> established catalog or market prices of commercial items sold in substantial quantities to the general public if the item being purchased is sufficiently similar to the commercial item to permit the difference between the prices of the items to be identified and justified without resort to cost analysis.¹²</p>
BEST AND FINAL OFFER (BAFO)	<p>In competitive negotiations, proposals prepared by offerors in the competitive range following completion of discussions and receipt of a written request for BAFOs from the contracting officer.¹³</p>
BID	<p>An offer in response to an Invitation for Bids.¹⁴</p>
BIDDER	<p>An offeror who submits a bid in response to an Invitation for Bids.</p>

⁹See FAR 15.610(d).

¹⁰See FAR 52.215-2.

¹¹See FAR 15.804-3(b)(3).

¹²See FAR 15.804-3(c)(6).

¹³See FAR 15.611.

¹⁴See the definition of offer in FAR 2.1.

GLOSSARY

BUY AMERICAN ACT	<p>An act requiring that only domestic end products be acquired for public use, except articles, materials, and supplies—</p> <ul style="list-style-type: none">• For use outside the United States.• For which the cost would be unreasonable, as determined in accordance with FAR 25.105.• For which the agency head determines that domestic preference would be inconsistent with the public interest.• That are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities, of a satisfactory quality (see FAR 25.108).• Purchased specifically for commissary resale.
COLLUSION	<p>Any consultation, communication, or agreement between two or more offerors or competitors relating to proposed prices, the intention to submit an offer, or the methods or factors used to calculate the prices offered.¹⁵</p>
COMMERCE BUSINESS DAILY	<p>A publication of the U.S. Department of Commerce in which Government agencies are required to announce (IFBs and RFPs) procurement invitations, contract awards, and sales of surplus property. A new edition of the CBD is issued every business day. Each edition contains approximately 500-1,000 notices. Each notice appears in the CBD only once.¹⁶</p>
COMPARABILITY	<p>The quality or state of being comparable. Comparable, in turn, means capable of, or suitable for, comparison. Comparison is examination of two or more items to establish similarities and dissimilarities.</p>
COMPETITION	<p>An environment of varying dimensions relating to buy-sell relationships in which the buyer induces, stimulates, or relies on conditions in the marketplace that cause independent sellers to contend confidently for the award of a contract.</p>
COMPETITIVE RANGE	<p>All proposals that the CO determines have a reasonable chance of being selected for award, based on cost or price and other factors that were stated in the solicitation. Unless the CO decides to award without discussions, the CO must conduct written or oral discussion with all responsible offerors who submit proposals within the competitive range.¹⁷</p>
CONSIDERATION	<p>Anything of value that changes hands between the parties to a contract.</p>

¹⁵See FAR 52.203-2(a)(1).

¹⁶See the Reader's Guide in the CBD.

¹⁷See FAR 15.609 and 15.610.

CONTINGENCY	A possible future event or condition arising from presently known or unknown causes, the cost outcome of which is indeterminable at a present time. ¹⁸
CONTRACT	A mutually binding legal relationship obligating the seller to furnish supplies or services (including construction) and the buyer to pay for them. ¹⁹
CONTRACT CLAUSE	A term or condition used in contracts or in both solicitations and contracts, and applying after contract award or both before and after award. ²⁰ Clauses state the rights and obligations of the parties to a contract.
CONTRACT MODIFICATION	Any written change in the terms of a contract. Unilateral modifications are signed only by the CO; bilateral by both parties. ²¹
CONTRACT PRICING	A series of actions used to obtain, evaluate, assess, verify, and adjudge cost or pricing information, and to record the steps taken to ascertain that prices agreed to have been found to be fair and reasonable.
CONTRACT SCHEDULE	The complete statement of the requirement in the solicitation, including not only the Statement of Work and Specifications but also the terms and conditions with respect to packaging and marking, inspection and acceptance, deliveries or performance, contract administration data, and other special contract requirements. The Schedule includes Sections A through H of the Uniform Contract Format. ²²
CONTRACT TYPE	(1) The name of the compensation arrangement established by the terms and conditions of the contract, such as Firm Fixed Price, Fixed Price Redeterminable, Cost Plus Award Fee, Cost Plus Fixed Fee, or Cost Plus Incentive Fee. ²³ (2) The name of the ordering arrangement established by the terms and conditions of an indefinite delivery contract, such as Definite Quantity, Indefinite Quantity, or Requirements. ²⁴
CONTRACTING	The purchasing, renting, leasing, or otherwise obtaining supplies or services from nonfederal sources. ²⁵
CONTRACTING ACTIVITY	An element of an agency designated by the agency head and delegated broad authority regarding acquisition functions. ²⁶

¹⁸See FAR 31.205-7.

¹⁹See FAR 2.1.

²⁰See FAR 52.101(a).

²¹See FAR 43.101 and 43.103.

²²See FAR 14.201-2, 14.201-9(b), and 15.406-2.

²³See FAR 16.101.

²⁴See FAR 16.501(a).

²⁵See FAR 2.1.

GLOSSARY

CONTRACTING OFFICER (CO)	An agent of the Government (see “agency”) with authority to enter into, administer, or terminate contracts and make related determinations and findings. ²⁷
CONTRACTING OFFICER'S REPRESENTATIVE (COR)	A Federal employee to whom a Contracting Officer has delegated limited authority in writing to make specified contract-related decisions. Depending on the type of authority delegated, may be referred to as the Contracting Officer's Technical Representative (COTR).
COST	<p>The amount of money expended (outlays) in acquiring supplies or services. The total cost of an acquisition includes:</p> <ul style="list-style-type: none">• The dollar amount paid to the contractor under the terms and conditions of the contract.• Any direct costs for acquiring the supplies or services not covered in the contract price.• Any cost of ownership not covered in the contract price.• The Government’s overhead for awarding and administering the contract.
COST ANALYSIS	The review and evaluation of the separate cost elements and proposed profit of (a) an offeror’s or contractor’s cost or pricing data and (b) the judgmental factors applied in projecting from the data to the estimated costs in order to form an opinion on the degree to which the proposed costs represent what the cost of the contract should be, assuming reasonable economy and efficiency. ²⁸
COST OR PRICING DATA	All facts as of the date of price agreement that prudent buyers and sellers would reasonably expect to affect price negotiations significantly. Cost or pricing data are factual, not judgmental, and are therefore verifiable. While they do not indicate the accuracy of the prospective contractor’s judgment about estimated future costs or projections, they do include the data forming the basis for that judgment. Cost or pricing data are more than historical accounting data; they are all the facts that can be reasonably expected to contribute to the soundness of estimates of future costs and to the validity of determinations of costs already incurred.

²⁶See FAR 2.1.

²⁷See FAR 2.1.

²⁸See FAR 15.801.

Examples of cost and pricing data:

- Vendor quotations.
- Information on changes in production methods and in production or purchasing volume.
- Data supporting projections of business prospects and objectives and related operations costs.
- Unit-cost trends such as those associated with labor efficiency.
- Make-or-buy decisions.²⁹

COST REIMBURSEMENT CONTRACTS

Contracts that provide for payment of allowable incurred costs, to the extent prescribed in the contract. These contracts establish an estimate of total cost for the purpose of obligating funds and establishing a ceiling that the contractor may not exceed (except at its own risk) without the approval of the contracting officer.³⁰

DEFENSE ACQUISITION REGULATORY COUNCIL (DARC)

A council comprised of representatives of the Secretary of Defense, the Army, the Navy, the Air Force, the Defense Logistics Agency, and NASA. Among other responsibilities, this council, along with the Civilian Acquisition Council (CAAC), maintains the FAR.

DELIVERY ORDER

An order made pursuant to FAR 52.216-18 against an indefinite delivery contract.³¹

DESIGN SPECIFICATION

A purchase description that establishes precise measurements, tolerances, materials, in process and finished product tests, quality control, inspection requirements, and other specific details of the deliverable.

DISCUSSIONS

Any oral or written communication between the Government and an offeror, (other than communications conducted for the purpose of minor clarification) whether or not initiated by the Government, that (a) involves information essential for determining the acceptability of a proposal, or (b) provides the offeror an opportunity to revise or modify its proposal.³²

ESTABLISHED CATALOG PRICE

A price included in a catalog, price list, schedule, or other form that (1) is regularly maintained by a manufacturer or vendor, (2) is published or made available for inspection by customers, and (3) states prices at which sales are currently or were last made to a significant number of buyers constituting the general public.³³

²⁹See FAR 15.801.

³⁰See FAR 16.301-1.

³¹See FAR 52.216-18.

³²See FAR 15.601.

³³See FAR 15.804-3(c)(1).

GLOSSARY

ESTABLISHED MARKET PRICE	A current price, established in the usual and ordinary course of trade between buyers and sellers free to bargain, which can be substantiated from sources independent of the manufacturer or vendor, although such pricing data may have to come from the seller. ³⁴
EVALUATION FACTORS	Factors in selecting an offer for award. ³⁵ See also Price-Related Factors and Technical Factors.
FACTFINDING	The process of identifying and obtaining information necessary to complete the evaluation of proposals. If a prospective bidder makes inquiries relative to other than readily available general information, it may be necessary to obtain specific information by communication with technical or other personnel in order to determine the appropriate response. This may include factfinding sessions with offerors as provided in FAR 15.807a.
FAIR AND REASONABLE PRICE	A price that is: <ul style="list-style-type: none">• Fair to both parties.• Reasonable under market conditions.• Reasonable considering the total cost of the acquisition.
FEDERAL ACQUISITION REGULATION (FAR)	Uniform policies and procedures for acquisition by executive agencies. The FAR is jointly prescribed, prepared, issued and maintained by the Department of Defense, the General Services Administration, and the National Aeronautics and Space Administration.
FEDERAL ACQUISITION REGULATORY COUNCIL	A council comprised of the Administrator for Federal Procurement Policy, the Secretary of Defense, the Administrator of National Aeronautics and Space Administration, and the Administrator of General Services. Under the Office of Federal Procurement Policy Act, this council assists in the direction and coordination of Government-wide procurement policy and procurement regulatory activities.
FEDERAL SPECIFICATIONS (FED SPECS)	Specifications and standards that have been implemented for use by all Federal agencies. GSA lists them in the Index of Federal Specifications, Standards, and Commercial Item Descriptions. ³⁶
FEDERAL SUPPLY SCHEDULES	Indefinite delivery contracts established by the General Services Administration with commercial firms. The Schedules are a required source for commonly used supplies and services, and provide Federal activities with a simplified process for obtaining such supplies and services at prices associated with volume buying. ³⁷

³⁴See FAR 15.904-3(c)(2).

³⁵See FAR 15.605.

³⁶See FAR 10.001.

³⁷See FAR 8.104(a).

FEE OR PROFIT	Money paid to a contractor over and above total reimbursements for allowable costs. ³⁸
FIRM FIXED-PRICE CONTRACT	A contract that establishes a price not subject to any adjustment on the basis of the contractor's cost experience in performing the contract. ³⁹
FIXED-PRICE CONTRACT	A contract that establishes a firm price or, in appropriate cases, an adjustable price. Fixed-price contracts providing for an adjustable price may include a ceiling price, a target price (including target cost), or both. Unless otherwise specified in the contract, the ceiling price or target price is subject to adjustment only by operation of contract clauses providing for equitable adjustment or other revision of the contract price under stated circumstances. See also Firm Fixed-Price contracts. ⁴⁰
FRAUD	A felonious act of corruption, or an attempt to cheat the Government or corrupt its agents.
FULL AND OPEN COMPETITION (FAOC)	FOAC means that all responsible sources are permitted to compete (although some sources may be excluded as provided in FAR §6.2). ⁴¹
FUNCTIONAL SPECIFICATION	A purchase description that describes the deliverable in terms of performance characteristics and intended use, including those characteristics which at minimum are necessary to satisfy the intended use.
GOVERNMENT ESTIMATE	Refers to any estimate of the purchase price for an item or service which has been prepared by or for the Government. ⁴²
GOVERNMENT PROPERTY	All property owned by or leased to the Government or acquired by the Government under the terms of the contract. It includes both (1) Government-furnished property and (2) property acquired or otherwise provided by the contractor for performing a contract and to which the Government has title. ⁴³
GOVERNMENT FURNISHED PROPERTY	Property in the possession of, or directly acquired by, the Government and subsequently made available to the contractor. ⁴⁴

³⁸See FAR 15.901(a).

³⁹See FAR 16.202-1.

⁴⁰See FAR 16.201.

⁴¹See FAR 6.003.

⁴²See FAR 15.803(b).

⁴³See FAR 45.101.

⁴⁴See FAR 45.101.

GLOSSARY

INDEFINITE DELIVERY CONTRACT	A type of contract used when the exact times and/or quantities of future deliveries are not known at the time of contract award. There are three variations of indefinite delivery contracts: 1) Definite-Quantity, 2) Requirements, and 3) Indefinite Quantity. ⁴⁵
INDEX NUMBERS	Ratios, indicating changes in values, quantities, or prices. Typically, the changes are measured over time, each item being compared with a corresponding figure from some selected base period.
INDIRECT COST	Any cost not directly identified with a single final cost objective but identified with two or more final cost objectives or with at least one intermediate cost objective. Also referred to as overhead or burden. ⁴⁶
INVITATION FOR BID (IFB)	The solicitation used in sealed bidding.
LABOR HOUR CONTRACT	A variation of the time-and-materials contract, differing only in that materials are not supplied by the contractor. ⁴⁷
LABOR SURPLUS AREA	A geographic area identified by the Department of Labor in accordance with 20 CFR 654, Subpart A, as an area of concentrated unemployment or underemployment or an area of labor surplus. ⁴⁸
LABOR SURPLUS AREA CONCERN	A concern that together with its first tier subcontractors will perform substantially in labor surplus areas. ⁴⁹
LETTER CONTRACT	A written preliminary contractual instrument that authorizes the contractor to begin immediately manufacturing supplies or performing services. ⁵⁰
LOAN GUARANTEES	Guarantees made by Federal Reserve banks, on behalf of designated guaranteeing agencies, to enable contractors to obtain financing from private sources under contracts for the acquisition of supplies or services for the national defense. ⁵¹
MARKET RESEARCH	Collecting and analyzing information about the entire market available to satisfy minimum agency needs to arrive at the most suitable approach to acquiring, distributing, and supporting supplies and services. ⁵²

⁴⁵See FAR 16.501(a).

⁴⁶See FAR 31.203.

⁴⁷See FAR 16.602.

⁴⁸See FAR 20.101.

⁴⁹See FAR 20.101.

⁵⁰See FAR 16.603-1.

⁵¹See FAR 32.102(c).

⁵²See FAR 10.001.

METHOD OF PROCUREMENT	<p>The process employed for soliciting offers, evaluating offers, and awarding a contract . In Federal contracting, contracting officers use one of the following methods for any given acquisition:</p> <ul style="list-style-type: none"> • Small Purchase • Sealed Bidding • Negotiation • Two-Step Sealed Bidding
MILITARY SPECIFICATIONS (MIL SPECS)	<p>Specifications and standards maintained by DoD and published in the DoD Index of Specifications and Standards.⁵³</p>
NEGOTIATION	<p>(1) A bargaining process between two or more parties seeking to reach a mutually satisfactory agreement or settlement on a matter of common concern. (2) A method of procurement prescribed in Part 15 of the FAR that includes the receipt of proposals from offerors, permits bargaining, and usually affords offerors an opportunity to revise their offers before award of a contract. Bargaining—in the sense of discussion, persuasion, alteration of initial assumptions and positions, and give-and-take—may apply to price, schedule, technical requirements, type of contract, or other terms of a proposed contract.⁵⁴</p>
NEGOTIATION OBJECTIVES	<p>(Prenegotiation Objectives): A range of goals, including desired costs or prices, which analysis indicates as the limits within which fair and reasonable contract provisions can be negotiated. These objectives should summarize all positions and assumptions relevant to price and other factors.⁵⁵</p>
OBLIGATION OF FUNDS	<p>Legally binding commitments, such as contract awards, made by Federal agencies during a given period that will require outlays during the same or some future period.</p>
OFFER	<p>A legally binding promise, made by one party to another, to enter into a contractual agreement, if the offer is accepted. In sealed bidding, offers made in response to Invitations To Bids (IFBs) are called “bids.” In negotiated acquisitions, offers made in response to a Request for Proposals (RFP) are called “proposals.”⁵⁶</p>
OFFICE OF FEDERAL PROCUREMENT POLICY (OFPP)	<p>An organization within the Office of Management and Budget (OMB) that provides leadership and direction to Federal procurement programs.</p>

⁵³See FAR 10.001.

⁵⁴See FAR 15.102.

⁵⁵See FAR 15.807.

⁵⁶See FAR 2.1.

GLOSSARY

OPTION	A unilateral right in a contract by which, for a specified time, the Government may elect to purchase additional supplies or services called for by the contract, or may elect to extend the term of the contract. ⁵⁷
OUTLAYS	Payments (e.g., checks issued, cash disbursed, and electronic fund transfers) by a Federal department or agency.
OVERHEAD	(See Indirect Cost).
PARTIAL PAYMENTS	Payments for items received and accepted by the Government when the contractor has shipped part of the order. Partial payments are generally treated as a method of payment and not as a method of contract financing. ⁵⁸
PERFORMANCE BOND	A bond that secures performance and fulfillment of the contractor's obligations under the contract. ⁵⁹
PERFORMANCE SPECIFICATION	A purchase description that describes the deliverable in terms of desired operational characteristics. Performance specifications tend to be more restrictive than functional specifications, in terms of limiting alternatives which the Government will consider and defining separate performance standards for each such alternative.
PRENEGOTIATION OBJECTIVES	(See Negotiation Objectives)
PRENEGOTIATION REVIEW	Meeting between contracting officer, supervisor, and, sometimes, other Government representatives before negotiating with offerors. Purposes include corroborating price objectives, eliciting management guidance, and obtaining approval to proceed.
PRICE	(1) A monetary amount given, received, or asked for in exchange for supplies or services. (2) Cost plus any fee or profit applicable to the contract type. Price analysis includes comparing the various bid prices; comparing current bid prices with prices previously paid; and other price analysis techniques. ⁶⁰
PRICE ANALYSIS	The process of examining and evaluating a proposed price without evaluating its separate cost elements and proposed profit. ⁶¹

⁵⁷See FAR 17.201.

⁵⁸See FAR 32.102(d).

⁵⁹See FAR 28.001.

⁶⁰See FAR 15.801.

⁶¹ See FAR 15.801.

PRICE NEGOTIATION MEMORANDUM	The document that tells the story of the negotiation. It is the document that establishes the reasonableness of the agreement reached with the successful offeror. It is also the permanent record of the decisions the negotiator made in establishing that the price was fair and reasonable. Called the PNM. ⁶²
PRICE-RELATED FACTOR	When evaluating offers for award, any factor applied in identifying that offer which would represent the lowest total cost to the Government. Examples include costs of inspection, transportation, and the cost of making multiple awards. Any price-related factors must have been stated in the IFB. ⁶³
PROCUREMENT PLANNING	Upon acceptance of the Purchase Request, the plan developed by a CO for soliciting offers, evaluating offers, and awarding a contract.
PROFIT	See Fee.
PROGRESS PAYMENTS	Payments made under a fixed price contract on the basis either of (1) costs incurred by the contractor as work progresses under the contract or (2) on physical progress in accomplishing the work. ⁶⁴
PURCHASE DESCRIPTION	Describe the essential physical characteristics or functions required to meet the Government's minimum need. ⁶⁵
PURCHASE ORDER (PO)	An offer by the Government to buy certain supplies or nonpersonal services and construction from commercial sources, upon specified terms and conditions, the aggregate amount of which does not exceed the small purchase limit. ⁶⁶
PURCHASE REQUEST (PR)	A requisition prepared by a requiring activity which (1) describes the supplies or services to be acquired, (2) certifies the availability of funds for the acquisition, and (3) includes other information, clearances, and approvals necessary for the CO to initiate the acquisition.
QUALITY	The extent to which the contract's deliverable satisfies the actual minimum needs of the end users.
QUALITY ASSURANCE (QA)	Functions, including inspection, performed to determine whether a contractor has fulfilled the contract obligations pertaining to quality and quantity. ⁶⁷

⁶²See FAR 15.808.

⁶³See FAR 14.201-8.

⁶⁴See FAR 32.102(b).

⁶⁵See FAR 10.001.

⁶⁶See FAR 13.101.

⁶⁷See FAR 46.101.

GLOSSARY

REASONABLE COST	A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by an ordinarily prudent person in the conduct of competitive business. ⁶⁸
REQUEST FOR PROPOSALS (RFP)	The solicitation in negotiated acquisitions.
REQUEST FOR QUOTATIONS (RFQ)	A document used in soliciting quotations. RFQs are used when the Government does not intend to award a contract on the basis of the solicitation but wishes to obtain price, delivery, or other market information as the basis for preparing a purchase order or for planning purposes. A quotation received in response to an RFQ is not an offer and cannot be accepted by the Government to create a binding contract.
RESPONSIBLE OFFEROR	An offeror that meets the General and any Special Standards established under FAR 9.104. ⁶⁹ To be determined responsible under the General Standards, a prospective contractor must— <ul style="list-style-type: none">• Have adequate financial resources to perform the contract, or the ability to obtain them;• Be able to comply with the required or proposed delivery or performance schedule, taking into consideration all existing commercial and governmental business commitments;• Have a satisfactory performance record;• Have a satisfactory record of integrity and business ethics;• Have the necessary organization, experience, accounting and operational controls, and technical skills, or the ability to obtain them (including, as appropriate, such elements as production control procedures, property control systems, and quality assurance measures applicable to materials to be produced or services to be performed by the prospective contractor and subcontractors);• Have the necessary production, construction, and technical equipment and facilities, or the ability to obtain them; and• Be otherwise qualified and eligible to receive an award under applicable laws and regulations.
RESPONSIVE	A bid that complies in all material respects with the IFB. ⁷⁰

⁶⁸See FAR 31.201-3.

⁶⁹See FAR 9.101.

⁷⁰See FAR 14.301(a).

RISK	<p>The probability of not attaining the goals for which the party entered into a contract. For the contractor (seller), the principal business or financial risk is an unexpected loss of money on the contract. For the Government, the principal risks are that:</p> <ul style="list-style-type: none"> • The total cost of the acquisition will be higher than expected or unreasonable in relation to the actual costs of performance. • The contractor will fail to deliver or will not deliver on time. • The final deliverable will not satisfy the Government’s actual need, whether or not “acceptable” under the terms and conditions of the contract. • The Government’s need will change prior to receipt of the deliverable.
SAMPLING	<p>A method of obtaining statistics from a large body of data without resorting to a complete census. Two broad methods of selecting samples are probability sampling (in which sample units are selected according to the law of chance) and nonprobability sampling (in which personal choice, expert judgement, or some other nonprobabilistic rationale is used to select sample units).</p>
SEALED BIDDING	<p>A method of procurement prescribed in Part 14 of the FAR that employs competitive bids, public opening of bids, and awards.⁷¹ Under this method:</p> <ul style="list-style-type: none"> • The CO issues an Invitation for Bids (IFB). • Offerors submit sealed bids. • The bids are publicly opened. • Award is made to the responsible bidder whose bid, conforming to the invitation for bids, will be the most advantageous to the Government, considering only price and the price-related factors included in the invitation. (§6.4.3)
SERVICE CONTRACT	<p>A contract that directly engages the time and effort of a contractor whose primary purpose is to perform an identifiable task rather than to furnish an end item of supply.⁷²</p>
SET-ASIDE	<p>An acquisition reserved exclusively for offerors who fit into a specified category. Set-asides are commonly established for small businesses and businesses in labor surplus areas.⁷³</p>
SHOULD-PAY PRICE	<p>The price that, in the contracting officer's best judgement, the Government should reasonably expect to pay for a deliverable based on the offers, historical prices (if any), commercial prices (if any), yardsticks (if any), and Government estimates (if any).</p>

⁷¹See FAR 14.101.

⁷²See FAR 37.101.

⁷³See FAR 19.501(a) and 20.201-1.

GLOSSARY

SINGLE SOURCE	Characterized as one source among others in a competitive marketplace which, for justifiable reasons (e.g., immediate or past experience, or current contractual involvement), is found to be most advantageous for the purpose of contract award. (Sometimes used interchangeably with the term <i>sole source</i> .)
SMALL BUSINESS CONCERN	A concern (including its affiliates) which is (1) independently owned and operated, (2) not dominant in the field of operation in which it is bidding on Government contracts, and (3) qualifies as a small business under the criteria and size standards in 13 CFR Part 121. ⁷⁴
SMALL PURCHASE	The acquisition of supplies, nonpersonal services, and construction in the amount of \$25,000 or less through the "simplified procedures" (e.g., interest funds, purchase orders, and blanket purchase agreements) prescribed in Part 13 of the FAR. ⁷⁵
SOLICITATION PROVISION	<p>A term or condition used only in solicitations and applying only before contract award. Provisions provide information to prospective offerors on such matters as:</p> <ul style="list-style-type: none">• Preparing and submitting offers.• The evaluation of offers and the offeror's right to protest award.⁷⁶ <p>Provisions are not included in the resulting contract.</p>
SOCIOECONOMIC OBJECTIVE	Any objective for an acquisition established by statute or by an Executive Order which is in addition to the innate goals (i.e., quality, cost, timeliness, risk, competition, and integrity) of the acquisition process.
SOLE SOURCE ACQUISITION	A contract for the purchase of supplies or services that is entered into or proposed to be entered into by an agency after soliciting and negotiating with only one source. ⁷⁷
SOLICITATION	A document requesting or inviting offerors to submit offers. Solicitations basically consist of (a) a draft contract and (b) provisions on preparing and submitting offers.

⁷⁴See FAR 19.001.

⁷⁵See FAR 13.101.

⁷⁶See FAR 52.101(a).

⁷⁷See FAR 6.003.

SOURCE SELECTION	<p>The process of soliciting and evaluating offers for award. Formal source selections⁷⁸ usually involve the:</p> <ul style="list-style-type: none">• Establishment of a group (e.g., a Source Selection Board) to evaluate proposals.• Naming of a Source Selection Authority, who might be the CO, the requiring activity manager, or a higher level agency official, depending on the size and importance of the acquisition.• Preparation of a written source selection plan.
SPECIFICATION	<p>A description of the technical requirements for a material, product, or service that includes the criteria for determining whether the requirements are met.⁷⁹</p>
STANDARD	<p>A document that establishes engineering and technical limitations and applications of items, materials, processes, methods, designs, and engineering practices; includes any related criteria deemed essential to achieve the highest practical degree of uniformity in materials or products, or the interchangeability of parts used in those products.⁸⁰</p>
STATEMENT OF WORK (SOW)	<p>The complete description of work to be performed under the contract, encompassing all specifications and standards established or referenced in the contract. The SOW constitutes Part C of the Uniform Contract Format.</p>
SUBCONTRACT	<p>Any contract entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.⁸¹</p>
SUBCONTRACTOR	<p>Any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime contractor or another subcontractor.⁸²</p>
SUPPLIES	<p>All property except land or interest in land, including (but not limited to) public works, buildings, and facilities; ships, floating equipment, and vessels together with parts and accessories; aircraft and aircraft parts, accessories, and equipment; machine tools; and the alteration or installation of any of the foregoing.⁸³</p>

⁷⁸See FAR 15.612.

⁷⁹See FAR 10.001.

⁸⁰See FAR 10.001.

⁸¹See FAR 44.101.

⁸²See FAR 44.101.

⁸³See FAR 2.1.

GLOSSARY

SYNOPSIS	(1) A brief description of the supplies and services to be acquired by contract. It also provides prospective offerors with information on obtaining a copy of the IFB or RFP from the responsible contracting office. Synopses are published in the Commerce Business Daily (CBD). ⁸⁴ (2) A notice of award published in the Commerce Business Daily (CBD). ⁸⁵
TECHNICAL ANALYSIS	An evaluation of functions that cause costs to occur. May be done by anyone, but usually by engineering and technical personnel. Vitrally important to understanding cost/price projections as they relate to the job to be done. For example: technical analysis can provide an informed and useful opinion about the validity of projections for direct materials and usage factors: about scrap and its relationship to the use of hand, semiautomatic or automatic operations; about the number and types of worker it takes to do a job; and about differences between the estimated labor mix and planned operations.
TECHNICAL FACTORS	Factors other than price-related used in evaluating offers for award. Examples include technical excellence, management capability, personnel qualifications, prior experience, past performance, and schedule compliance. ⁸⁶
TECHNICAL LEVELING AND TRANSFUSION	Negotiation tactics prohibited under FAR 15.610. Technical leveling means helping an offeror to bring its proposal up to the level of other proposals through successive rounds of discussion, such as by pointing out weaknesses resulting from the offeror's lack of diligence, competence, or inventiveness in preparing the proposal. Technical transfusion means disclosing technical information supplied by one offeror (or otherwise pertaining to that offer) to other, competing offerors. ⁸⁷
TERMINATION FOR CONVENIENCE	Generally, the exercise of the Government's contractual right to completely or partially terminate a contract for the convenience of the Government. ⁸⁸
TERMINATION FOR DEFAULT	Generally, the exercise of the Government's contractual right to completely or partially terminate a contract because of the contractor's actual or anticipated failure to perform its contractual obligations. ⁸⁹
TERMS AND CONDITIONS	All language in a solicitation and contract, including amendments, attachments, and referenced clauses and provisions.

⁸⁴See FAR 5.201.

⁸⁵See FAR 5.301.

⁸⁶See FAR 9.104-2 and 15.605.

⁸⁷See FAR 15.610(d).

⁸⁸See FAR 49.002.

⁸⁹See FAR 49.401.

TIME AND MATERIALS CONTRACT	A type of contract that provides for acquiring supplies or services on the basis of (1) direct labor hours at specified fixed hourly rates that include wages, overhead, general and administrative expenses, and profit and (2) materials at cost, including, if appropriate, material handling costs as part of material costs. ⁹⁰
TIMELINESS	Delivery of requisitioned supplies to the end user in the quantity and at the time necessary for the end user's purposes, or performance of services at the time necessary for the end user's purposes.
UNALLOWABLE COST	Any cost which, under the provisions of any pertinent law, regulation, or contract, cannot be included in prices, cost-reimbursements, or settlements under a Government contract to which it is allocable. ⁹¹
UNIFORM CONTRACT FORMAT (UCF)	A format for preparing solicitations and contracts prescribed in FAR 14.201-1 and 15.406-1.
VALUE ANALYSIS	A systematic and objective evaluation of the function of a product and its related cost. The analyst evaluates the product characteristics in terms of aesthetics, utility, and demand. As a pricing tool, value analysis provides insight into the inherent worth of a product.
VISUAL ANALYSIS	The visual inspection of an item or its drawings, from which a general estimate may be made about probable value. In most instances, visual analysis deals with obvious external features.

⁹⁰See FAR 16.601(a).

⁹¹See FAR 31.001.

GLOSSARY

APPENDIX B

ACRONYMS

ADP	-	Automated Data Processing
BLS	-	Bureau of Labor Statistics
BRC	-	Blue Ribbon Contractor
BRCL	-	Blue Ribbon Contractor List
C/CS	-	Cost or Cost Sharing Contract
CAS	-	Cost Accounting Standards
CERs	-	Cost Estimating Relationships
CO	-	Contracting Officer
COR	-	Contracting Officer's Representative
CPAF	-	Cost-Plus-Award-Fee Contract
CPF	-	Cost-Plus-Fixed-Fee Contract
CPI	-	Consumer Price Index
CPIF	-	Cost-Plus-Incentive-Fee Contract
DARC	-	Defense Acquisition Regulatory Council
DOD	-	Department of Defense
EPA	-	Economic Price Adjustment
EPQ	-	Economic Purchase Quantity
FAR	-	Federal Acquisition Regulation
FFP	-	Firm Fixed-Price Contract
FPAF	-	Fixed-Price Award Fee Contract
FPEPA	-	Fixed-Price Economy Price Adjustment Contract
FPI	-	Fixed-Price Incentive Contract
FPPRD	-	Fixed-Price Prospective Redeterminable Contract
FSC	-	Federal Stock Class
FSS	-	Federal Supply Schedules
GAO	-	General Accounting Office
GFP	-	Government Furnished Property
GSA	-	General Accounting Office
ID	-	Indefinite Delivery Contract
IFB	-	Invitation for Bids
IGPE	-	Independent Government Price Estimate
LSA	-	Labor Surplus Area
NAPM	-	National Association of Purchasing Managers
OFPP	-	Office of Federal Procurement Policy
OIRM	-	Office of Information Resources Management
OMB	-	Office of Management and Budget
OMB	-	Office of Management and Budget
PNM	-	Price Negotiation Memorandum
PO	-	Purchase Order
PPI	-	Producer Price Index
PR	-	Purchase Request
QA	-	Quality Assurance
RFP	-	Request for Proposal
RFQ	-	Request for Quotations
SOW	-	Statements of Work
SPIs	-	Supplier Performance Indexes
T&M	-	Time & Materials Contract
UCF	-	Uniform Contract Format
VRS	-	Vendor Rating Systems

ACRONYMS

APPENDIX C

FAR REFERENCES

REFERENCES	PAGE
FAR 3.104.....	10-39
FAR 3.303(c)	8-20
FAR 3.303(f).....	8-21
FAR 5.207.....	2-64
FAR 6.101(a)	2-3
FAR 6.301(c)	3-20, 6-25
FAR Part 7.....	1-4, 1-5
FAR 7.103(k)	1-17
FAR 7.202.....	2-10
FAR 7.3.....	9-19, 10-39
FAR 7.304.....	9-19, 9-20
FAR 7.305.....	9-20
FAR 7.306.....	9-19
FAR 7.401.....	4-47, 5-43
FAR 7.402.....	4-47
FAR 8.2.....	2-54
FAR 8.202-3	2-54
FAR 8.6.....	2-54
FAR 8.604(c)	2-54
FAR 8.7.....	2-54
FAR 8.707(f).....	2-54
FAR 9.103.....	I-27,4-22, 8-9
FAR 10.001	2-19, 2-20
FAR 10.004	2-43
FAR 10.004(a)(1)	2-3
FAR 10.004 (a)(3)(i).....	2-23
FAR 10.004 (b)(2)	2-21, 2-34
FAR 10.004 (b)(3)	2-19, 2-22
FAR 10.004 (e)	2-30
FAR 10.006(a).....	2-25

FAR REFERENCES

REFERENCES	PAGE
FAR 10.006(b).....	2-25
FAR 10.007.....	2-26, 2-27
FAR 11.000.....	2-19
FAR 11.002.....	2-17
FAR 11.003.....	2-17, 2-19
FAR 13.106(a)(4).....	6-4, 11-19
FAR 13.106(c).....	6-4, 11-19, 11-20
FAR 14.103-2.....	11-18
FAR 14.103-2(d).....	11-18
FAR 14.201.....	2-4, 2-5
FAR 14.201-6(q).....	5-7
FAR 14.201-8.....	4-3
FAR 14.403(d).....	11-13
FAR 14.404.....	4-3, 2-39
FAR 14.404-1.....	9-3
FAR 14.404-1(b) and (c).....	9-16 through 9-19
FAR 14.404-1(c).....	10-39, 11-16
FAR 14.404-1(c)(6).....	8-3
FAR 14.404-2.....	9-3
FAR 14.404-2(f).....	9-6
FAR 14.404-2(g).....	9-13, 9-14
FAR 14.406.....	9-6, 11-14
FAR 14.406-2.....	9-6
FAR 14.406-3.....	9-8, 9-10
FAR 14.406-3(g)(1).....	9-7
FAR 14.406-3(g)(2).....	9-7
FAR 14.406-3(g)(5).....	9-11, 11-14
FAR 14.407-2.....	6-5, 11-18

REFERENCES	PAGE
FAR 14.407-6.....	11-17
FAR 14.407-7.....	11-18
FAR 15.103.....	9-23
FAR 15.215-3.....	2-40
FAR 15.402	1-41
FAR 15.404	2-39
FAR 15.405.....	2-40
FAR 15.402	1-41
FAR 15.406.....	2-4, 2-5
FAR 15.407(h).....	5-7
FAR 15.608(a)(1)	8-9, 8-10, 10-21
FAR 15.606.....	6-28
FAR 15.608(b).....	10-39
FAR 15.608(b)(4).....	10-40
FAR 15.609.....	10-25
FAR 15.609(a).....	10-20
FAR 15.609(c).....	10-20
FAR 15.610(a).....	10-14, 10-16
FAR 15.610(b).....	10-19
FAR 15.610(c).....	10-34
FAR 15.610(d).....	10-35,10-37
FAR 15.610(e).....	10-33, 10-35
FAR 15.801	I-2, I-35, I-38
FAR 15.802(b).....	I-25
FAR 15.804	I-35, I-38
FAR 15.803(b)	1-6
FAR 15.804-2(a)(2).....	3-11, 3-13
FAR 15.804-3(b)(iii).....	2-21
FAR 15.804-3(b)(1).....	3-18
FAR 15.804-3(b)(2).....	3-18, 6-22, 6-26
FAR 15.804-3(b)(3).....	3-18
FAR 15.804-3(c)	3-18, 6-34
FAR 15.804-3(c)(4).....	3-27
FAR 15.804-3(c)(8).....	6-22

FAR REFERENCES

REFERENCES	PAGE
FAR 15.804-3(d).....	3-18
FAR 15.804-3(g).....	3-17
FAR 15.804-6.....	3-22
FAR 15.804-6(a).....	I-38, 3-11, 3-38, 3-40, 10-7
FAR 15.805-2.....	3-30, 6-5, 6-11
FAR 15.807(b).....	11-20
FAR 15.808.....	11-21
FAR Parts 16, 32, 35, 52.....	2-49 through 52
FAR 17.5.....	2-11
FAR 19.5.....	2-53
FAR 19.502-2(a).....	2-53
FAR 19.502-3.....	2-53
FAR 19.806.....	2-54
FAR 19.807.....	2-54
FAR 20.201.....	2-53
FAR 20.201-1.....	2-53
FAR 23.203.....	4-44
FAR 24.2.....	11-13
FAR 25.102.....	4-19
FAR 25.105.....	4-20
FAR 32.304-2.....	2-56
FAR 32.402.....	2-56
FAR 32.501-1.....	2-56
FAR 45.101.....	2-58
FAR 45.202-3.....	5-31
FAR 45.2.....	4-28
FAR 45.205.....	5-28
FAR 45.301.....	2-57
FAR 45.302.....	2-57
FAR 45.403.....	5-29
FAR 46.201.....	2-31
FAR 46.703.....	2-59
FAR 47.301-1 & 2.....	4-32

REFERENCES	PAGE
FAR 47.303-1 through 17.....	5-36
FAR 47.304.....	5-35
FAR 47.304-1.....	5-35
FAR 47.305-2 through 16.....	5-35, 5-36
FAR 47.306-2.....	4-35, 5-37, 5-38
FAR 52.207-1.....	9-19
FAR 52.214-22.....	4-10 through 12, 5-8
FAR 52.215-3.....	2-40
FAR 52.215-34.....	4-10 through 12, 5-8
FAR 52.217-5.....	4-39
FAR 52.219-7.....	4-15
FAR 52.225-3.....	4-19, 5-11
FAR 52.225-1.....	4-20, 5-13
FAR 52.232-20 through 23.....	2-51, 2-52
FAR 53.215-2(b).....	3-28
FAR 52.245-9.....	4-29, 4-31, 5-29, 5-30

FAR REFERENCES

APPENDIX D

INDEX OF COURSE TOPICS

TOPIC	PAGE
8(a) program	2-54
"Abstract of Offers"	11-9
Accounting for differences (between offered and "should pay" prices)	8-7
Acquisition histories	1-17
Acquisition planning	1-4
Adequate price competition.....	3-19, 6-26
Adjusting prices for comparison	6-17
Adjusting prices for inflation/deflation.....	7-15
Administrative costs (as a price-related factor).....	5-7
Advance payments	2-56
Aggregate awards	4-9
Approaches to contract pricing (of the Government).....	I-35
Approaches to pricing (of sellers)	I-7
Assumed administrative costs (as a price-related factor).....	5-7
Award combinations	4-7
Award without discussions	10-13
"Based on" adequate price competition	3-23
Bases for price analysis (see "Types Of Comparisons")	I-37, 6-21
Blue ribbon contractor programs	4-24, 5-18
Brand-name purchase descriptions (defined)	2-19
Brand-name purchase descriptions (discouraging).....	2-21
Brand-name-or-equal purchase descriptions (critiquing).....	2-22
Brand-name-or-equal purchase descriptions (defined).....	2-19
Breaking ties in sealed bidding	11-17
Bureau of Labor Statistics.....	7-10
Buy American Act.....	4-19, 5-11
Cancelling IFBs (price-related reasons for)	9-15
Cancelling RFPs	10-39
Catalog pricing exemption	3-24, 6-31
Certified cost or pricing data (requiring submission after proposal evaluation).....	10-10
Certified cost or pricing data requirements	3-7
Commercial indexes.....	7-10

INDEX OF COURSE TOPICS

TOPIC	PAGE
Commercial prices (as a base for price analysis).....	6-31
Commercial purchase description (defined)	2-19
Commercial terms and conditions (promoting).....	2-28
Commercializing the purchase description.....	2-17
Comparability	6-7
Comparing adjusted prices to offered prices.....	6-18
Competition (adequacy of).....	3-19, 6-26
Competition (does it exist?).....	3-20, 6-24
Competition (importance of maximizing)	2-3
Competition, extent of (as a factor affecting comparability)	6-14
Competitive prices (as a base for price analysis).....	6-24
Competitive range.....	10-19
Consolidating requirements.....	2-10
Constructing price index numbers	7-8
Consumer Price Index.....	7-12
Contingencies (exclusion of)	I-33
Contract payment and finance terms (impact on prices).....	2-55
Contract type (impact on prices)	2-48
Cost analysis (defined).....	I-38
Cost estimating relationships	7-45
Cost realism analysis	10-8
Cost-based pricing strategies (of sellers).....	I-8
Current-revenue pricing.....	I-19
Dealer competition	2-21
Decision table (catalog exemption).....	3-27
Defective pricing 3-8	
Defective specifications (impact on offered prices)	8-22
Definite-quantity contracts (to consolidate requirements)	2-12
Delivery schedule (impact on prices)	2-35
Demand differential pricing.....	I-22
Design specifications (impact on prices)	2-15
Determining the competitive range.....	10-19
Determining the need for cost data (after proposal evaluation)	10-7
Determining the need for discussions	10-13

APPENDIX D

TOPIC	PAGE
Determining the need for fact-finding.....	10-25
Determining the need to cancel an RFP.....	10-39
Developing cost estimating relationships.....	7-48
Discussions With Offerors.....	10-13, 10-31
Document pricing actions in negotiations.....	11-19
Documenting pricing actions in sealed bidding.....	11-7
Documenting the basis for considering the award price reasonable.....	11-18
Draft RFPs.....	2-40
Economic data (non-Government).....	1-35
Economic Order Quantity.....	2-11
Energy conservation and efficiency factors.....	4-44, 5-39
Establishing pre-negotiation price positions.....	10-31
Estimating "proper price level or value".....	1-45
Exemptions from requirements for certified data.....	3-15
Fact-finding.....	10-25
Factors that affect comparability.....	6-12
"Fair and reasonable price" (as a pricing objective).....	I-27
Family or group buys.....	4-11
Federal specification or standard (defined).....	2-19
Federal specifications or standards (exemptions and alternatives).....	2-25
Federal supply schedules.....	1-32, 4-13
Finance terms (impact on prices).....	2-55
Fixed costs.....	7-30
Formula(s) for applying price-related factors.....	4-48
Functional specifications (impact on prices).....	2-16
Furnishing Government property (impact on prices).....	2-57
Geography (as a factor affecting comparability).....	6-14
Government and commercial indexes.....	7-10
Government economic data.....	1-33
Government estimates (as a base for price analysis).....	6-46
Government estimates (in purchase requests).....	1-9
Government furnished property (as a price-related factor).....	4-29, 5-27
Government property (impact on prices).....	2-57
Government's approaches to contract pricing.....	I-35

INDEX OF COURSE TOPICS

TOPIC	PAGE
Government's pricing objectives.....	I-25
Graphs (use in price analysis).....	7-39
Historical prices (as a base for price analysis).....	6-37
Indefinite delivery contracts (to consolidate requirements)	2-11
Indefinite-quantity contracts (to consolidate requirements)	2-12
Independent Government Estimate (see "Government estimates")	1-9
Index numbers	7-7
Industry feedback on proposed specifications.....	2-39
Inflation and deflation (adjusting prices for).....	7-15
Labor Hour and Earnings Report	7-11
Labor surplus area set-asides.....	2-53
Lease vs. Purchase	4-46, 5-43
Life-cycle costs	4-40
Linear price-volume relationship - algebraic analysis.....	7-32
Linear price-volume relationship - graphic analysis	7-39
Manufacturer and dealer catalogs	1-26
Margin on direct cost	I-11
Mark-up pricing I-9	
Market competition pricing	I-23
Market conditions (impact on offered prices).....	6-12, 8-19
Market pricing exemption.....	3-32, 6-31
Market research — (what to research).....	1-22
Market skimming	I-18
Market-based pricing strategies (of sellers).....	I-15
Market-share pricing.....	I-17
Markets and pricing advantage	I-29
Method of award clauses or provisions	4-49
Mistakes (by vendors, in terms of impact on offered prices).....	8-16
Mistakes in bids 9-6	
Monthly Labor Review.....	7-12
Multiple awards for different line items	4-10
Multiple awards for the same line item	4-13
Multiyear contracting (impact on pricing).....	4-36
Negotiation after cancelling an IFB.....	9-22

APPENDIX D

TOPIC	PAGE
Noncompetitive negotiations.....	10-33
Optimum market segment	2-32
Options (impact on pricing).....	4-36
Partial payments 2-55	
Partial set-aside awards.....	4-15
Participants in price analysis	I-39
Payment and finance terms (impact on prices).....	2-55
Performance specifications (impact on prices).....	2-14
Potential trade-offs between price and other terms	10-37
Pre-negotiation price positions (establishing).....	10-31
Preliminary price estimates.....	1-6
Premium products.....	2-33
Prenegotiation memoranda	11-20
Preparing for price analysis	1-4
Presolicitation conferences	1-41, 2-39
Presolicitation notices.....	1-41, 2-39
Price (defined)	I-2
Price analysis (defined).....	I-37
Price comparisons.....	I-37, 6-7
Price competition (does it exist?).....	3-20, 6-24
Price index numbers	7-7
Price Negotiation Memoranda	11-21
Price-related factors	4-17, 5-1
Price-related information in acquisition histories	1-19
Price-related reasons for cancelling the IFB.....	9-16
Price-volume analysis.....	7-29
Price/Direct Cost Ratio.....	7-55
Pricing each contract separately (as a pricing objective)	I-31
Pricing objectives (of sellers)	I-6
Pricing objectives (of the Government).....	I-25
Pricing strategies (impact of vendor differences).....	8-15
Pricing yardsticks (as a base for price analysis).....	6-41
Producer Price Index.....	1-33, 7-11
Product brochures and promotional materials.....	1-27

INDEX OF COURSE TOPICS

TOPIC	PAGE
Product standards and testing laboratories.....	1-29
Production efficiency (impact of vendor differences)	8-14
Production technology (impact of vendor differences).....	8-12
Profit-maximization pricing.....	I-16
Progress payments.....	2-55, 2-56
Progressive awards.....	4-12
Promotional pricing.....	I-21
"Proper price level or value".....	1-6, 1-45
Publicizing the acquisition (impact on prices)	2-63
Published market data	1-24
Purchase descriptions (how to commercialize).....	2-17
Purchase requests.....	1-9
Purchasing power (as a factor affecting comparability)	6-14
Quality-related factors	4-22, 5-17
Quantity (as a factor affecting comparability).....	6-13
Rate of return pricing.....	I-13
Ratio analysis (price to estimated direct cost).....	7-55
Recording bids	11-8
Recording how any ties were broken.....	11-17
Recording the reasons for rejection of bids.....	11-14
Regulated pricing exemption	3-35
Requirements (impact of vendor interpretations and misunderstandings).....	8-10
Requirements contracts (to consolidate requirements).....	2-13
Requiring additional data to support a catalog or market price	3-37
Requiring cost or pricing data after receipt of proposals	10-7
Requiring submission of uncertified data	3-40
Researching market data	1-21
Responsibility (impact of differences in vendor responsibility).....	8-9
Restrictive requirements (obtaining relief from).....	2-41
Reviewing acquisition histories	1-17
Reviewing purchase requests.....	1-9
Rules of thumb	7-47
Selecting price-related factors for award	4-1, 4-17
Selecting prices for comparison.....	6-11

APPENDIX D

TOPIC	PAGE
Seller's pricing objectives and approaches	I-5
Semi-variable costs.....	7-30
Set-asides	2-53
SF 1412	3-28
"Should Pay Price".....	6-7
Small business set-asides.....	2-53
Small purchases (bases and depth of price analysis).....	6-4
Socioeconomic requirements (impact on prices).....	2-53
Solicitations for Information or Planning Purposes.....	1-41, 2-40
Sources of published market data	1-24
Sources of unpublished market data	1-38
Special terms and conditions (impact on comparability).....	6-15
Specifications (defined).....	2-20
Specifications (impact on prices)	2-14
Split awards 4-14	
Standards (defined)	2-20
Statements of Work (characteristics).....	2-17
Strategies for improving business terms and conditions.....	2-47
Strategies for improving the schedule	2-9
Supplier performance index.....	4-27, 5-24
Target-profit pricing.....	I-20
Targeting the optimum market segment.....	2-32
Technical evaluation factors (impact on prices).....	2-60
Technology (as a factor affecting comparability)	6-15
Technology (impact of vendor differences)	8-12
Terms and conditions (impact on offered prices).....	8-23
Thomas Register 1-30	
Trade journals	1-28
Transportation price-related factors	4-32, 5-35
Trend analysis	7-23
Types of acquisition histories.....	1-18
Types of price comparisons.....	6-21
Unbalanced bids 9-13	
Uncertified cost data (requiring submission of)	3-40

INDEX OF COURSE TOPICS

TOPIC	PAGE
Uniform Contract Format.....	2-4
Value analysis	6-47
Variable costs	7-30
Vendor differences.....	8-8
Vendor rating systems.....	4-25, 5-21
Visual analysis	6-49
Voluntary Standards (defined)	2-20
Waiver of Certified Data Requirements	3-17
Warranty requirements (impact on prices).....	2-59